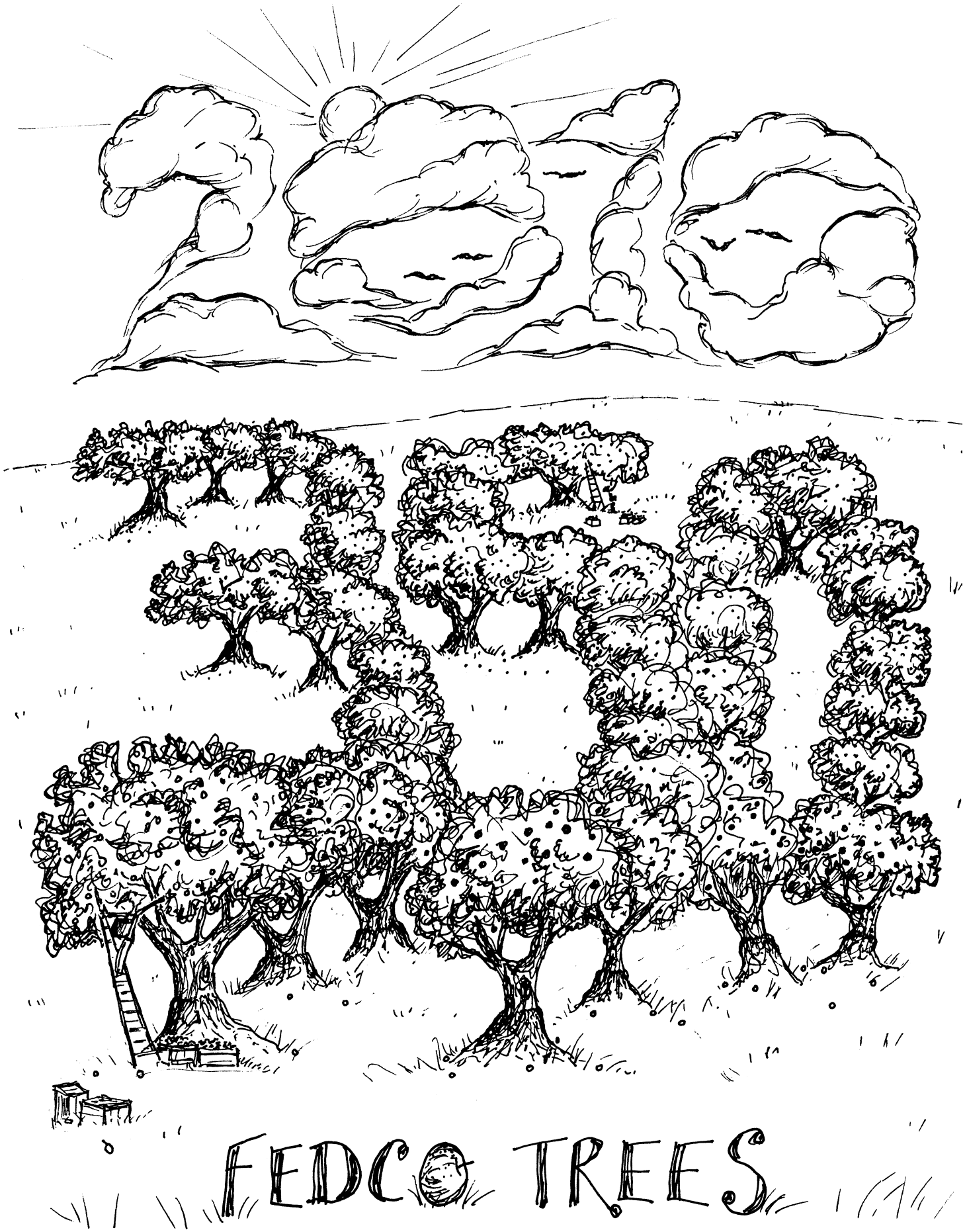
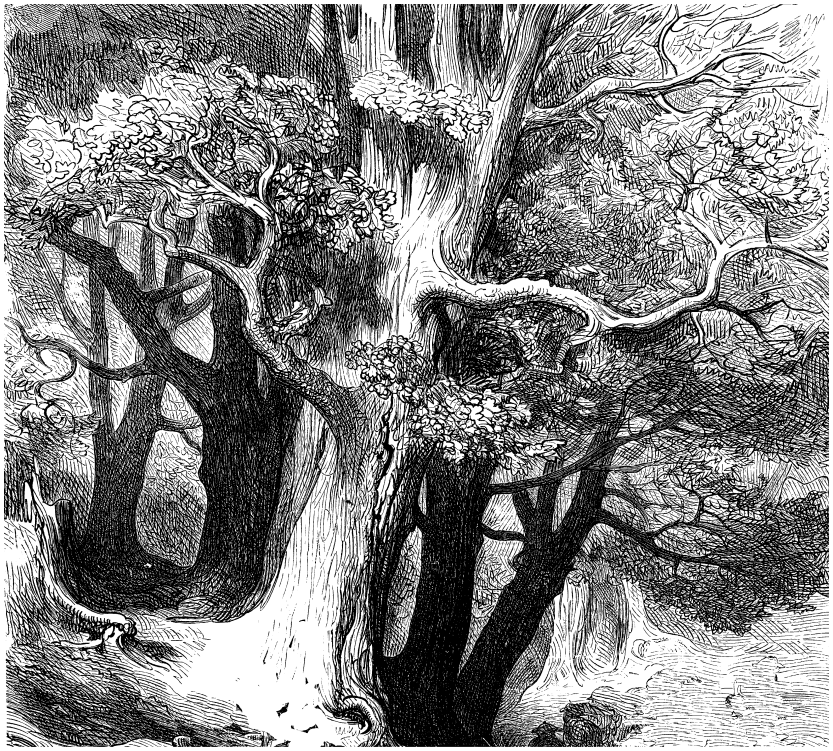

FEDCO TREES



FEDCO TREES 2010

Welcome to Fedco Trees' 26th annual order. Our goal is to provide the hardiest and healthiest plants available for cold climates, while supporting small-scale, local agriculture and a fair, cooperative and responsible workplace. Our no-frills operation and volume discounts help keep plants affordable. Consider ordering in a group with co-workers, friends or neighbors to further minimize your costs.

Why 350?

Recently the number 350 seems to be popping up here and there. People in New England and around the world are starting to take notice. There was a wonderful photo in one of the local papers a few months ago of 350 people (or so) all lined up in a giant 350.

I first heard of 350 when friends began making plans to scythe a huge 350 into one of their hayfields. Something for gas-guzzling air travelers to muse upon as they soar over Waldo County. We should all be thinking about 350. Why 350? Most climate scientists believe that a 350 parts per million (ppm) concentration of carbon dioxide is the maximum our atmosphere can contain without causing irreversible runaway climate change. It could be the most important number of the 21st (or any) century.

Before the Industrial Revolution and the advent of many carbon-burning technologies, atmospheric carbon dioxide hovered around 275 ppm. At 275, life on earth ebbed and flowed and did its thing for a very long time. It might well have gone on forever. But in the last 250 years that number began to rise. And it has risen fast. Currently the number stands at about 387 ppm. This is too high.

Although things look grim, even the most sober scientists believe that it is not too late. Reducing and then stabilizing carbon dioxide at 350 ppm will limit global warming to 2.7 degrees Fahrenheit above pre-industrial levels. We can still get back to 350 ppm. It will mean transforming the world. What better use of the next few years?

One thing that struck me over and over again the last time I read Dickens was how—even in London—everyone seemed to be walking everywhere. I love photos of the city streets of China teeming with bicycles. Though the bike "traffic jams" were many, the riders weren't wearing breathing masks as they do today. And that wasn't all that long ago.

It was also not that long ago that small mills dotted the streams of even the smallest towns in Maine, making good use of the spring run-off yet adding no carbon dioxide to the air. When my parents were kids you could take trains from Boston to Provincetown or from Palermo, Maine, to San Francisco. And when my grandparents were newlyweds, nearly everyone had a garden—most of New England's food was being produced around the corner and if you didn't have an orchard in your backyard, your neighbor probably did.

The time for world transformation is now. The possibilities are many. 350 is not too far away yet. A quick internet search will open up a myriad of 350-related opportunities. But it's also easy to invent your own ways to help. For example, plant a tree!

We do special orders. If you wish to buy large quantities of any item, larger or smaller plants than we are listing, rooted cuttings, or unusual items we're not listing, please write with particulars.

All of our trees are unconditionally guaranteed. If your tree or shrub does not grow to your satisfaction during the first growing season, please let us know! We'll send a refund or you can order a replacement the following year. We don't have a huge staff or a fancy set of offices. If we don't respond quickly, don't hesitate to remind us; we are in business to serve you. Enjoy the catalog!

Please share your experiences growing plants with us. Many of our selections originated from your suggestions. If you know of something growing near you we should be offering, or if you are interested in growing for us, please write to us. We welcome your comments, suggestions, and ideas. Thank you for your support.

John Bunker & Susan Kiralis

Our website: **www.fedcoseeds.com**
then click on Fedco Trees.

- **You may order online.**
- **Check product availability online.**

We also post color photos of most of our trees, shrubs and perennials and a wide range of information.

Ordering instructions	**p. 3**
Order Forms	**center**
Complete index	**p. 59**

Phone 207-873-7333

	begin on page
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Small Fruits & Berries	**21**
Conifers, Nut & Shade Trees	**30**
Ornamental Trees & Shrubs	**34**
Tender Summer Bulbs	**46**
Perennials	**48**
Medicinal Plants	**56**

We guarantee the quality of our trees and plants, and warrant that all items we offer are fully satisfactory.
If you are dissatisfied for any reason, we will replace the item or refund the purchase price.

Please inspect your order upon receipt and use the correction sheet to notify us immediately of any problems. Because good results depend upon weather, soil and cultural practices over which we have no control, we limit our liability in all instances to the purchase price. The liability of Fedco Seeds, Inc., for breach of warranty, or any loss or damages arising out of the purchase or use of our products, including loss or damages resulting from any negligence whatsoever on our part, or strict liability in tort, shall be limited to the purchase price. By acceptance of the merchandise, the buyer acknowledges that the limitations and disclaimers herein described are conditions of sale, and that they constitute the entire agreement between the parties regarding any warranty or liability. Claims for any defects in Fedco's products should be presented to Fedco as soon as possible after discovery. Failure to assert claims within 30 days after discovery renders this warranty null and void.

Ordering Information —

Order items from this catalog on a Trees 2010 **order form**, in the center of the catalog; you may submit as many pages as you need, either photocopies, forms downloaded from our website or printouts mimicking our format. To encourage you to participate in a group order and to order early, we give discounts.

Payment with check, money order or credit card must accompany all orders. We request that all orders under $25 pay by check or MO. Make your check out to Fedco. We will bill or refund you for any adjustments as each order is completed.

We accept Visa and MasterCard. We will charge your credit card when we receive your order.

- **Mail** your order: **Fedco Trees, PO Box 520, Waterville, ME 04903-0520.** Keep a copy of your order for your records. To confirm receipt of your order, enclose a stamped self-addressed postcard.
- **Online**: go to **fedcoseeds.com** and click on Fedco Trees.
- **We do not take fax or phone orders.**

Group orders: mail us at one time all the order forms from your group members with one payment and we will ship all the orders, packaged individually, to one address. The group total earns the discount if it qualifies. Use the front of an order form for a group address and payment cover sheet. We recommend making a copy of each group member's order before you send the batch to us. We are not yet equipped to take group orders online.

Maine sales tax - for **Maine residents and pickups only.** Please add 5% sales tax.

We charge **$10 for handling if you adjust your order**. Additions, deletions and cancellations are costly for us to process. You are welcome to place as many separate orders as you wish.

We will offer surplus for sale at the Tree Sale. Sometimes we have stock left over after the Tree Sale, but never after May 15th, when we shut down completely and go home to plant.

Our Planting Guide
is incorporated into the catalog. **Save your catalog** for planting and cultural instructions. The catalog is also available online. We will not send planting guides with orders unless you request them.

Our Variety Descriptions –

All trees and plants are bare-rooted (except where noted), and even a large order can fit into a station wagon. All fruit and nut trees are well-rooted, 1/4-7/8" in diameter.

Fruit trees are grafted onto the hardiest standard-sized rootstocks available, except where noted. Standard trees are stronger rooted, hardier, and longer lived than dwarf or semi-dwarf trees. If you want a smaller tree, keep it pruned.

For fruit trees and berries, the **exact dates of peak ripeness** will vary from place to place.

The **zone hardiness rating** will aid you in determining whether a plant will be hardy for you. The average minimum temperature in your area determines your zone. See the chart below. Apple descriptions have minimum *and* maximum zones because apples typically need cold climates to produce the best fruit. Your own soil conditions, micro-climate and topography will be equally important in determining the best varieties for you.

Please note **pollination** requirements for fruits, nuts and berries. Some plants are self-pollinating, others require a second plant for pollination, and others require a plant of a second variety.

We strive to give you accurate information about all the plants we sell. If you notice inaccuracies, please let us know.

John writes the tree and shrub descriptions and Susan writes tender bulb and perennial descriptions.

Statements about medicinal uses of plants have not been evaluated by the FDA, and should not be used for the diagnosis, treatment, cure or prevention of any ailment. Before using or ingesting any medicinal plant, consult a healthcare practitioner familiar with botanical medicine.

USDA Hardiness Zone	Average Minimum Temperature
2	-50° to -40°
3	-40° to -30°
4	-30° to -20°
5	-20° to -10°
6	-10° to 0°

Cover by John Bunker and Phoebe Bunker

Discounts & Deadlines —

Discount deadline is **Friday, December 11, 2009.** Sorry, no volume discounts on later orders. Discounts apply only to orders shipped to one address.

over $200	10% discount
over $400	15% discount

Special discounts may be available for very large orders; please email trees@fedcoseeds.com or call (207) 873-7333 for a quote.

We fill all orders on a first-come first-served basis.

Final order deadline is **March 12, 2010.**

Shipping & Pickup —

We ship most orders **via UPS beginning in early April**, and continue for about 10 days, timed according to planting zone. Our last regular ship date is around April 16. We will have a special late ship date around May 5. We do not ship at other times.

Shipping charges: All shipped orders pay a $5 box charge in addition to shipping charges. Shipping is 10% of your adjusted total with the following minimums.

area	minimum charge
New England	$7.00
NY, NJ and PA	$9.00
all other states	$14.00

We ship to Alaska via Priority Mail; include 20% for shipping (minimum $14) and supply a postal address.

If you require a particular ship date during our regular shipping time or for late shipment around May 5, **we charge an additional $15** to cover our extra handling costs.

Pick up your order during our annual Tree Sale at our warehouse in Clinton, Maine. Friday and Saturday, April 30–May 1, are reserved for preorder customers. The second Friday and Saturday, May 7–8, we are open to the public. **Sale hours are 9:00–3:00** each day. We will send you a pickup reminder and map in April.

VARIETY NAME → SEASON OF RIPENESS → A6. STATION TEST NUMBER → YEAR OF INTRODUCTION

White Lightning Peach High Summer. (MD 20-20) *P. persica* x *P. saccheratum* Greenbelt Research Station, Landover, MD, 2008. Perfect tree for uncertain times. As global warming takes its toll, some years will be too cold for good fruit ripening, other years so hot that the fruit will rot on the tree. Hybridized for enhanced sugar production, so unripe fruit is sweet and ripe fruit packs a nice wallop. **ME Grown.** Z4-8.

2020 White Lightning peach, $22.00

ITEM NUMBER → PRICE → GROWN BY FEDCO GROWERS CO-OP → ZONE RANGE

BOTANICAL NAME → COMMON NAME → MATURE HEIGHT x WIDTH → PARENTAGE

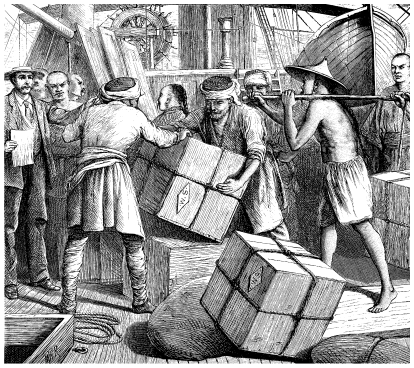
***Nux alata-dextra* 'Right's' Wingnut** 10x3' *N. cheneyii* x *N. pharma* A post-election introduction. Short-lived shallow-rooted tree produces large crops of ill-informed nuts. Does well when fertilized with uncomposted bovine manure. Z3. (badly-rooted 2x4" transplants)

3006 Right's Wingnut, $38.00 special!

ZONE HARDINESS RATING → SIZE OF PLANT STOCK

When you get your order: Immediate Care

When your new trees and plants arrive they are breaking dormancy and need to be planted as soon as possible. The longer they remain unplanted, the more stressed they become and the longer their recovery will take.



DO NOT ALLOW ROOTS TO DRY OUT AT ALL!!!

If You Intend To Plant Trees & Shrubs Within 48 Hours

Leave the plastic wrapping around the root ball. Add some water to remoisten the packing material and store your trees/plants in a cool shaded place like a shed, barn or cellar. Avoid heat and sunlight.

If You Cannot Plant Your Trees Within 48 Hours

You may keep plants for a week or two by following one of two temporary measures and continuing to water trees when they need it.

1) Remove the plastic wrap around the root ball. Store plants in a cool shaded place. Wrap the roots in wet shredded newspaper or sawdust, packing firmly to eliminate air pockets. Water thoroughly.

2) "Heel in" your plants. Dig a trench or turn back an appropriate amount of earth and bury roots; tamp firmly to remove air pockets. Water thoroughly.

Asparagus

Open up asparagus roots and store dry and uncovered in a cool shaded place.

Strawberries

Refrigerate strawberry plants until you are ready to plant them.

Perennials

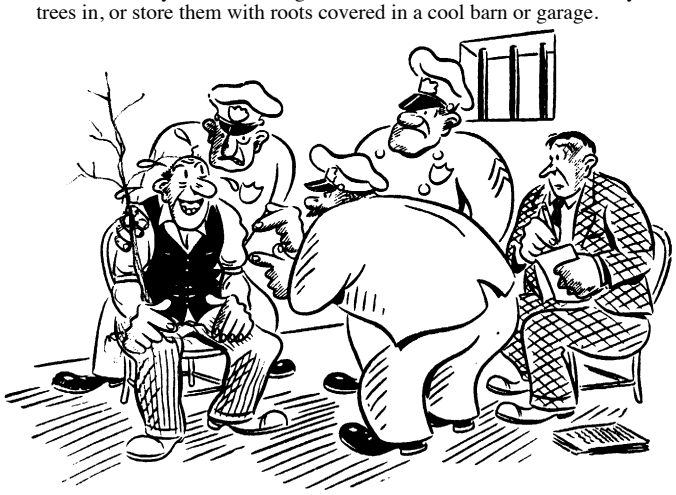
Open bags and check the stock immediately. Roots and crowns should be firm and pliable, not squishy or brittle. If they are slightly dry, add a little water or, if they are going to be potted up soon, soak the roots. Generally, a little surface mold is harmless and will not affect the plant's future performance. If you cannot pot the crowns up immediately, store them in a cool (35–40˚) location for a short time. See page 48 for details.

Sweating Nursery Stock

Some trees and shrubs become extremely dormant during refrigerated storage. These include: Amelanchier (juneberry), Betula (birch), Celtis (hackberry), Cercis (redbud), Crataegus (hawthorne), Morus (mulberry), Quercus (oak), and Potentilla (cinquefoil).

Sweating nursery stock ensures breaking of dormancy. The easiest way to force any tree to break bud is to pot it and set it in a greenhouse or polyhouse. After the tree begins to leaf out, transplant it outdoors. If you don't have a greenhouse, lay the trees in a shady place, 45–70˚, such as a garage, basement, barn, greenhouse, or outdoors in the shade. Cover the whole plant with very damp packing material (hay, newspaper, etc.) followed by a sheet of plastic. Sweating will take several days; check the buds every day. The trees are ready to plant when the buds begin to swell.

Warm May weather will give the best results. Until then, heel your trees in, or store them with roots covered in a cool barn or garage.



TREE PLANTING AND CARE

Choosing a Site for Fruit Trees and Berries

The best sites for fruit crops have well-drained fertile soils, protection from wind, good air drainage, and full sun. A gentle slope and six to eight hours of full sun per day is ideal. Good air flow will moderate frosts and fungal disease. If possible, avoid "frost pockets."

Sunny south- or west-facing slopes are not advisable for less hardy varieties. These slopes tend to warm up before the danger of frost has passed. Trees may flower prematurely and then be damaged by frost, causing loss of fruit. South and west slopes may also have widely fluctuating early spring temperatures that can damage less hardy trees.

Soil pH for fruit trees should be between 5.5 and 8.0, towards the lower end for apples, the higher end for peaches, and in the middle for others. Fruit species have optimal space requirements. See chart below.

Do not plant trees where power lines will interfere with them.

Fall Preparation or Spring Initial Feeding for Fruit Trees

If you're interested in preparing locations for your trees this fall, or for feeding newly planted fruit trees, the following amendment recipe should address most sites in the eastern U.S., which tend to be acidic, and moderate to low in calcium and phosphorus. You can apply this mix as a mulch to your newly planted tree in the spring. To order any of these products, refer to the Organic Growers Supply section of our Seed catalog or website.

Deluxe Method

Without digging the hole, cover an area 4–6' in diameter with:

- 5 lbs gypsum or Hi-Cal lime
- 5 lbs colloidal phosphate (short-term calcium and phosphorus)
- 5 lbs azomite (long-term minerals and trace minerals)
- 5 lbs granite meal or greensand (for improved soil texture)
- 2–3 lbs menafee humates (aids mineral and rock-powder breakdown)

For building high levels of humus, also add:

- 2 lbs alfalfa meal
- 2 lbs bone char or bone meal
- 2 lbs kelp meal
- 2 lbs blood meal
- 100 lbs compost (1/8 yard)
- BioDynamic preps (optional)

Cover with a 3–4" mulch of lawn clippings, leaves or "brush" chips, which will smother the sod, conserve moisture, prevent leaching, and provide a habitat for soil organisms to break down the recipe. In the spring, pull back the mulch and dig your tree hole, incorporating the mineral supplements and compost into the backfill.

Simpler Method

Forgo the soil amendments and simply pile 1–2 wheelbarrow loads of compost on each planting-hole site. If you live by the ocean, add a couple of wheelbarrows of seaweed. Then cover with mulch. In the spring, pull back the mulch and plant your fruit tree, incorporating the compost into the hole as you dig.

Feeding older fruit trees

Cover the surface of the ground out to the drip line with the same materials listed above. For larger trees (five years and older) increase the mineral amount to 10–15 pounds each. For ancient trees you can add up to 25 lbs of each mineral in a ring beneath the drip line. Mulch as described above.

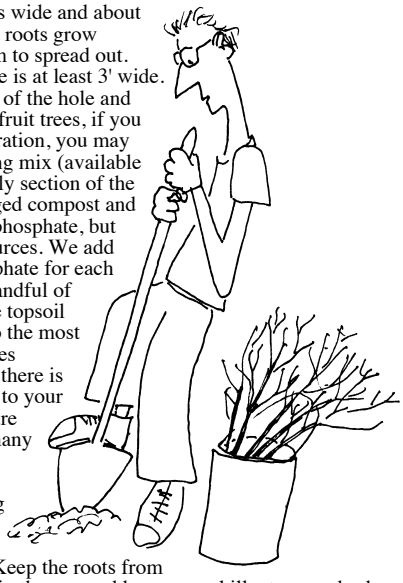
Plant Spacing of Fruit Trees and Berries

	between plants	between rows
Apples, Semi-dwarf	15'	15'
Apples, Standard	25–30'	25–30'
Asparagus	1–2'	4'
Blackberries	3–4'	6–12'
Blueberries, highbush	3–6'	8–10'
Blueberries, lowbush	1'	1'
Filazel	4'	hedge
Grapes	8'	8–10'
Kiwis	10'	10'
Nut trees - orchard	35'	35'
Nut trees - forest	20'	20'
Pears, Asian Pears	20'	20'
Raspberries	2'	6–12'
Stone Fruit	15–20'	15–20'
Strawberries	see instructions, p. 25	
Sweet Cherries	25'	25'

The basics of tree care are outlined here and are designed to get you going. Obviously we can't tell you everything you need to know in a few pages. Additional information, such as location and soil preferences, about specific plants is in the item descriptions. Reading, observation, trial and error, and talking with other growers and extension agents can expand your knowledge of trees and shrubs. A soil test is useful in determining the specific needs of your site.

Consult the Fedco Seeds catalog, Organic Growers Supply section, book list for some recommended reference books, or look for information on the internet. There are many useful links at our website, www.fedcoseeds.com.

General Planting Directions for Trees and Shrubs



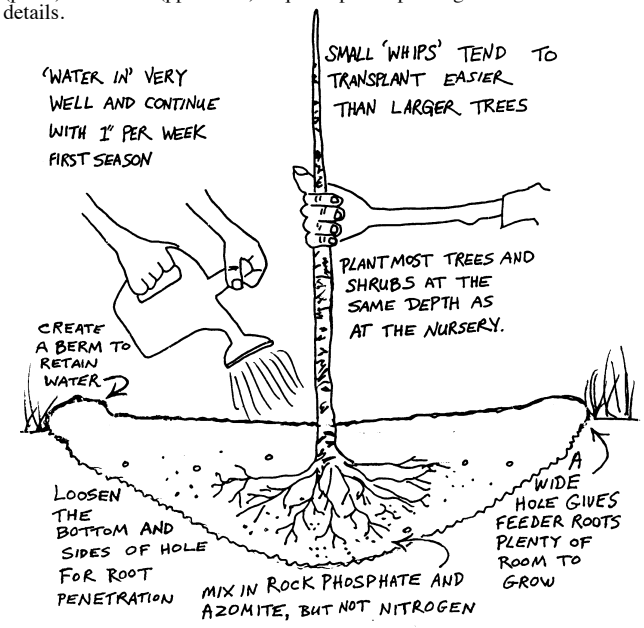
Dig a large hole, at least twice as wide and about as deep as the root system. Most roots grow laterally and need plenty of room to spread out. Your trees will benefit if the hole is at least 3' wide. Loosen up the soil at the bottom of the hole and especially around the sides. For fruit trees, if you haven't used a deluxe fall preparation, you may add a 3-pound bag of our planting mix (available from the Organic Growers Supply section of the Fedco Seeds catalog), or well-aged compost and mineral fertilizers such as rock phosphate, but not manure or other nitrogen sources. We add about a coffee-can of rock phosphate for each fruit tree. You may also add a handful of azomite at this time. Replace the topsoil around the roots where it will do the most good. If you situate non-fruit trees according to their requirements, there is no need to add any supplements to your soil. This is the best way to ensure that your plants will thrive for many years.

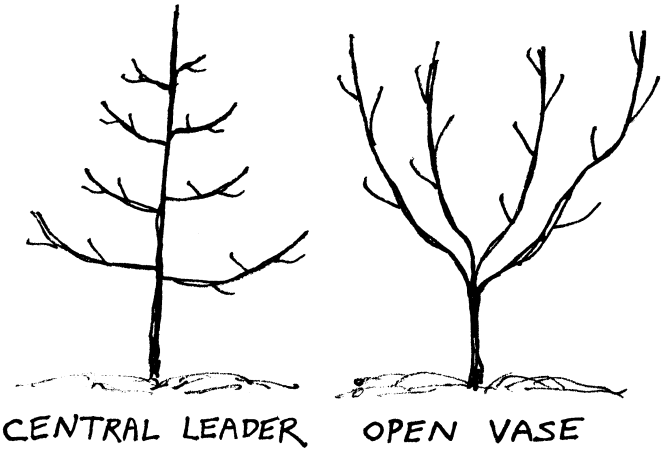
For best results plant on cool cloudy days in the early morning or late afternoon. Soak deciduous trees and shrubs for up to 24 hours before planting. Keep the roots from drying out. Even a few minutes in the sun and breeze can kill a tree or shrub. Keep them in a bucket of water as you plant.

Generally you should plant trees and shrubs at the same depth that they grew in the nursery. Plant semi-dwarf or dwarf fruit trees with the graft 2" above ground level. Spread the roots out as you set the trees in the holes. Make a mound at the bottom of the hole over which to spread the roots. Give your trees plenty of water to "puddle in" as you plant. Wiggle the trunk as the water seeps in to ensure that the roots are settled in with no air pockets. Leave a berm around each tree so that water will seep in and not run off. Keep them well watered throughout the first summer. They require the equivalent of 1–2" rain per week. A good soaking is effective; sprinkling is not.

Initial Pruning

Prune dead or injured branches and roots on all trees and shrubs. Further pruning of most trees is not necessary at planting time. Do not prune tops or prune or bend tap roots of nut trees. Specific preplanting pruning requirements for small fruits and some ornamentals is noted in their respective sections and more general information on pruning begins on p. 38. Conifers (p. 30) and roses (pp. 42-43) require special pruning. See their sections for details.


'WATER IN' VERY WELL AND CONTINUE WITH 1" PER WEEK FIRST SEASON
SMALL 'WHIPS' TEND TO TRANSPLANT EASIER THAN LARGER TREES
PLANT MOST TREES AND SHRUBS AT THE SAME DEPTH AS AT THE NURSERY.
CREATE A BERM TO RETAIN WATER
LOOSEN THE BOTTOM AND SIDES OF HOLE FOR ROOT PENETRATION
MIX IN ROCK PHOSPHATE AND AZOMITE, BUT NOT NITROGEN
A WIDE HOLE GIVES FEEDER ROOTS PLENTY OF ROOM TO GROW



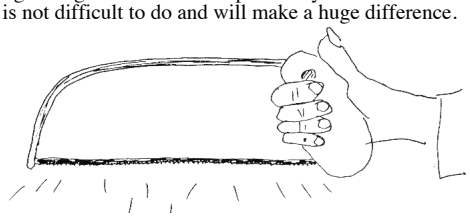
Pruning Fruit Trees

Avoid pruning young trees except to establish a basic shape. Pruning young trees delays bearing. On apple and pear trees, leave the central leader alone and let it grow. It's ok to cut off extra trunks and large branches. Always remove suckers or root shoots from fruit trees. On peaches and plums, the trees may want to develop 2–4 leaders, or an open-vase shape. Always prune just above a good strong bud that faces a direction you'd like your plant to grow.

Pruning your young apple tree

Think seriously about establishing the long-term shape of your apple tree when it is young. How you shape your tree is largely a matter of personal preference. We grow only standard trees. We want the lowest scaffold (branch layer) to be very wide to collect as much sun as possible. If too low, these long branches will rest on the ground under the weight of fruit and deer will have a field day. Plus, it becomes difficult to mow, mulch, etc. We recommend training standard apple trees to have the first scaffold at about 4–6' high.

Once the tree begins to bear you will want to prune annually. Good pruning brings sunlight to all parts of your tree. Maximum sunlight encourages more and higher-quality fruit. Sunlight also encourages fruit buds to form for next year's crop. A well-pruned tree will produce larger fruit and will tend toward more annual bearing. Good pruning discourages fungal diseases and promotes greater spray penetration. There's an old saying that a bird should be able to fly through your fruit tree. Any good book on growing fruit trees will provide you the information you need. Pruning is not difficult to do and will make a huge difference.



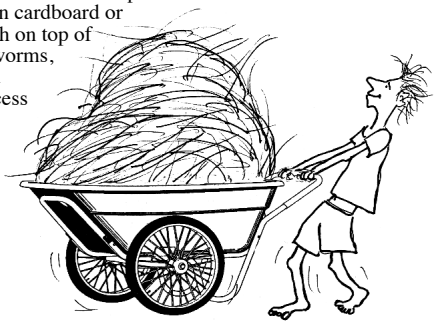
Most pruning should be done in late winter or early spring, although some say the best time to prune is when you have your clippers in your hand. We recommend a good-quality pair of hand shears and a lightweight pruning saw. You may also wish to invest in long-handled loppers, a pole pruner or a pole saw. Keep your pruning tools sharp for smooth, clean cuts.

Consult old and new books as well as orcharding articles and develop a system that works for you.

Weeping crabapples require special pruning. See p. 36 for instuctions.

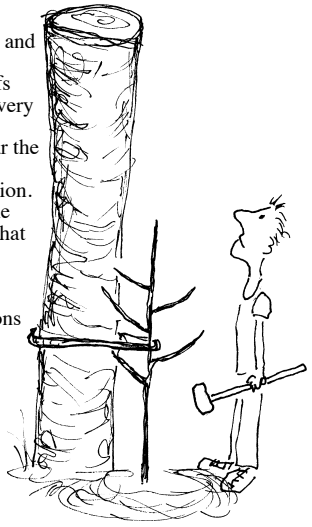
Mulch

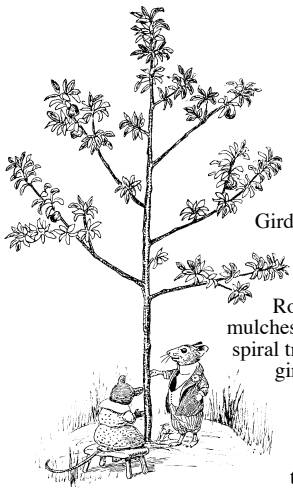
Keep weeds and especially grass away from new trees and shrubs. Apply a 2–4" mulch of composted material, leaves, wood chips or hay out as far as the drip line. A 1/2–1" topdressing of alfalfa meal beneath the mulch may substantially reduce transplant shock. Keep mulch back several inches from the tree trunks. We lay down cardboard or newspaper and spread mulch on top of it. Mulch encourages earthworms, holds moisture, keeps down weeds, insulates against excess heat and cold, aerates and loosens soils, builds humus and fertilizes feeder roots, 90% of which are within 6" of the surface.



Staking

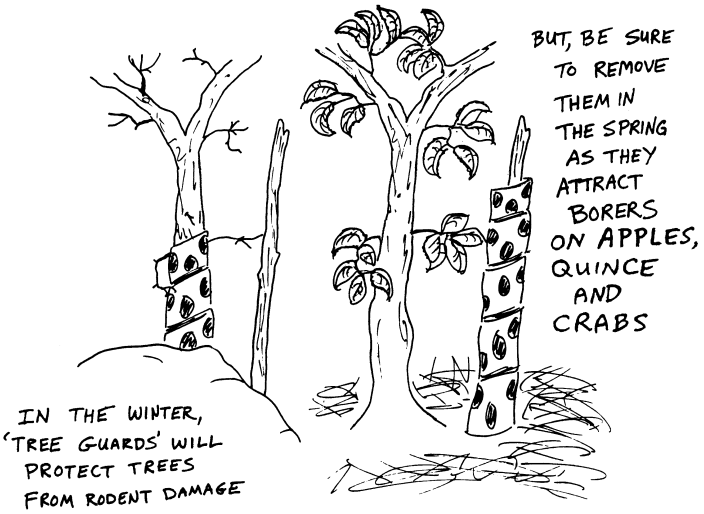
Newly planted standard-sized fruit trees and ornamental trees seldom need staking. Dwarf trees require staking. Semi-dwarfs may require staking. If your tree is in a very windy site or develops a leaning habit, staking may help. Drive a stout post near the tree. Wrap the tree trunk with a scrap of burlap or rubber to protect against abrasion. Secure the wrapped part of the tree to the post with string or wire. Tie tree somewhat loosely, as a slight rocking motion will encourage rooting. Once roots are well anchored, the stake may not be needed. Mark small trees with a stake with ribbons to warn operators of lawn mowers, tractors, cars, skidders and Bradley armored vehicles.





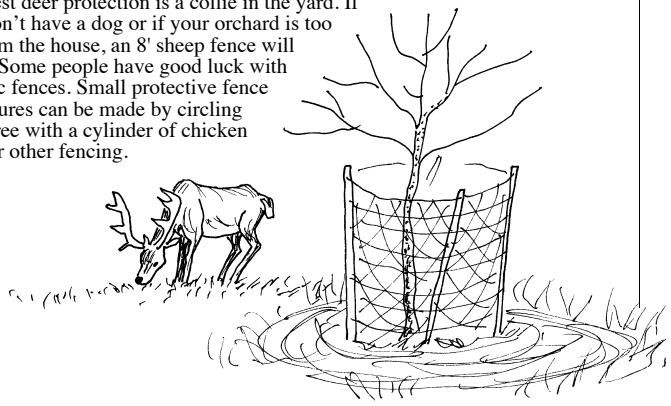
Mouse/Vole Protection

Fruit trees and ornamentals are sometimes girdled by mice or voles eating the bark. Girdling will usually kill the tree or shrub. The danger is greatest in winter. Keep the grass mowed in the fall and remove large mulch piles from near the trunks. Rodents like to nest in hay more than in chip mulches. A wrap of window screening or a plastic spiral tree guard will protect your tree from being girdled. If you use screening or plastic spiral tree guards on apple, quince or crabapple trees, remove them from April to October, as they attract borers if left on the tree in the summer. You can leave plastic spiral tree guards on most other trees year round.


BUT, BE SURE TO REMOVE THEM IN THE SPRING AS THEY ATTRACT BORERS ON APPLES, QUINCE AND CRABS
IN THE WINTER, 'TREE GUARDS' WILL PROTECT TREES FROM RODENT DAMAGE

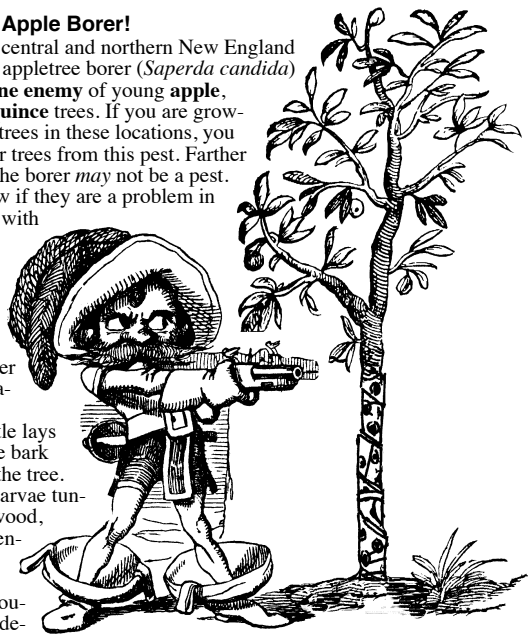
Oh Dear, Deer!

The best deer protection is a collie in the yard. If you don't have a dog or if your orchard is too far from the house, an 8' sheep fence will work. Some people have good luck with electric fences. Small protective fence enclosures can be made by circling your tree with a cylinder of chicken wire or other fencing.



Beware of the Apple Borer!

In many parts of central and northern New England the roundheaded appletree borer (*Saperda candida*) is **the number one enemy** of young **apple**, **crabapple** and **quince** trees. If you are growing young apple trees in these locations, you must protect your trees from this pest. Farther south and north the borer *may* not be a pest. If you don't know if they are a problem in your area, check with any grower near you: they'll know. Otherwise, err on the side of caution. The borer does not endanger other fruit trees or ornamentals.

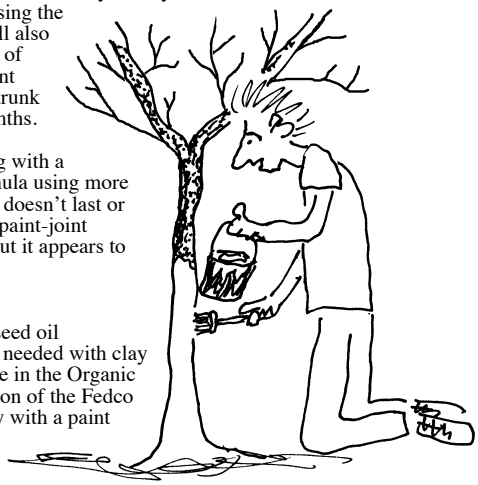


The borer beetle lays its eggs under the bark near the base of the tree. The developing larvae tunnel through the wood, eventually weakening the tree until it crumbles and falls over. The trouble sign is small deposits of orange sawdust, called frass, at the base of the tree, usually appearing in June or July. Left unchecked, borers usually mean death for your trees.

Borers thrive in shady moist warm environments. Keep grass back at least 6" from the tree base. Activity is most prevalent in June and July. Keep a lookout for the frass. Locate the hole or soft spot in the trunk and insert a wire until you locate and kill the larvae. Cut away soft, spongy pockets with a knife. Even serious carving is less harmful to the tree than leaving the larvae alive inside.

After years of experimentation, I think that **painting is the best deterrent**. I've tried a number of recipes and this is my favorite. It's easy and requires no hard-to-find ingredients. Mix white *interior* latex paint with joint compound. (The stuff you smear on sheet rock joints and nail holes—you can buy a small tub at any hardware store. Some exterior paint formulations contain ingredients that can harm the underlying phloem.) The consistency should be thick but still quite easy to paint, not glob on. Repaint periodically or each year as needed. This mix will help deter borers. It will also make for easy detection of any infestation you may have.

Look for the frass! Using the paint method, you will also need to put some sort of screen or plastic rodent protector around the trunk during the winter months.



We are experimenting with a borer-protection formula using more benign ingredients. It doesn't last or adhere as well as the paint-joint compound mixture, but it appears to work fairly well.

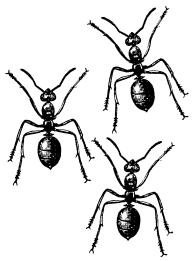
2 qt quick lime
4 gal milk
1 gal boiled linseed oil

Mix well. Thicken as needed with clay or Surround (available in the Organic Growers Supply section of the Fedco Seeds catalog). Apply with a paint brush. Reapply as needed.

For many years I used a homemade "screen saver" wrapped around the young trees to deter borers. No more. I've given up and switched to the paint method. I recommend you do too.

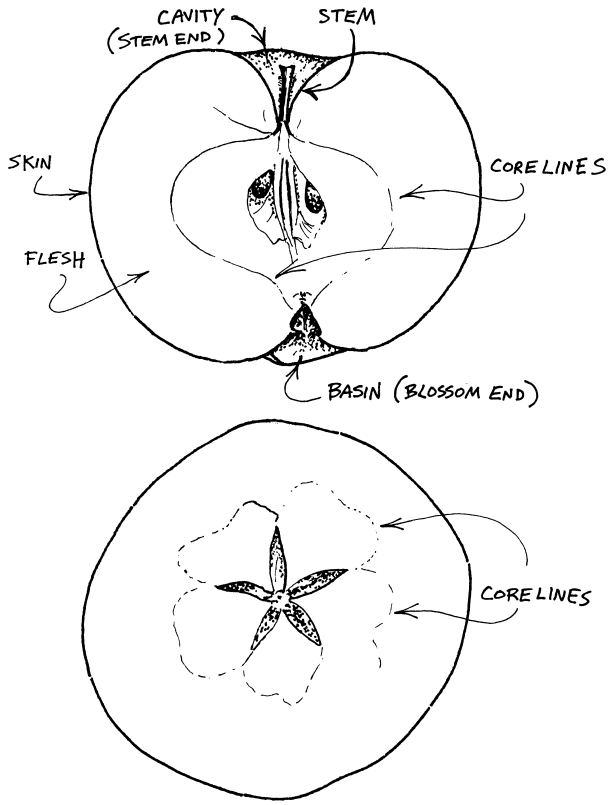
Aphids and ants

Aphids can do a lot of damage to apple trees and they make the young leaves look gross. Here's an easy solution. Wrap a piece of stiff paper about 6" wide around the trunk about a foot or two off the ground. Tape this "sleeve" to itself but not to the tree. Smear Tanglefoot on the paper. In a day or two no more aphids.



Choosing the right apple!

Item	Name	Zones	Suitable for Coldest Spots	Season	Uses	Best apples for: All–Around	Fall Eating	Storage	Cooking	Pies	High Flavor	Cider
0028	Ashmead's Kernel	4-7		winter	dessert			●			●	●
0039	Aunt Penelope Winslow	4-7		fall	all purpose	●	●		●			
0045	Baldwin	4-6		winter	all purpose	●		●	●	●		●
0063	Belle De Boskoop	4-6		winter	cooking				●	●		
0077	Black Oxford	4-5		winter	all purpose	●		●	●	●		●
0127	Centennial	3-5	●	summer	all purpose	●			●			
0156	Chestnut	3-5	●	fall	all purpose	●	●				●	
0170	Cortland	4-5		fall	all purpose	●	●		●			
0185	Crimson Beauty	3-4	●	summer	cooking		●			●		
0216	Duchess of Oldenburg	3-4	●	summer	all purpose	●			●	●		
0245	Esopus Spitzenburg	4-7		winter	all purpose	●		●			●	●
0260	Fameuse	3-5	●	fall	all purpose	●			●		●	●
0266	Fireside	3-5	●	winter	all purpose	●	●	●		●		
0280	Freedom	4-6		fall	dessert		●					
0282	Frostbite (MN 447)	4-6		winter	dessert		●	●			●	
0291	Garden Royal	4-6		summer	dessert		●				●	
0319	Golden Russet	4-6		winter	all purpose	●		●			●	●
0329	GoldRush	4-7		winter	dessert			●			●	●
0355	Grimes Golden	4-8		fall	dessert	●	●		●			●
0361	Haralson	3-5	●	winter	all purpose	●		●	●	●		●
0386	Honeycrisp	3-4	●	winter	dessert		●	●			●	●
0475	Liberty	4-6		fall	cooking	●	●					●
0497	Macoun	4-6		fall	dessert		●					
0522	McIntosh	4-5		fall	all purpose	●	●		●			
0621	Northern Spy	4-6		winter	all purpose	●		●	●	●	●	●
0646	Opalescent	4-6		fall	dessert		●				●	
0696	Pewaukee	3-5	●	fall	cooking			●	●			
0710	Pomme Grise	3-5	●	fall	dessert		●	●				
0810	Redfree	4-6		summer	all purpose	●	●		●			
0825	Rhode Island Greening	4-7		fall	all purpose	●			●	●		
0952	Stark	4-5		winter	all purpose	●		●	●			●
0955	Starkey	4-5		fall	dessert		●				●	
1017	Sweet Sixteen	3-6	●	fall	dessert		●				●	●
1054	Trailman	3-4	●	fall	dessert						●	
1130	Wealthy	3-4	●	fall	all purpose	●	●		●	●		
1145	Wickson	4-8		fall	all purpose	●	●				●	●
1153	Williams Pride	4-7		summer	dessert						●	
1162	Winekist	4-6		summer	all purpose	●	●		●			●
1164	Winesap	4-7		winter	all purpose	●		●		●	●	●
1190	Wolf River	3-5	●	fall	cooking				●			
1214	Yellow Transparent	3-5	●	summer	cooking				●			
1224	Zestar	3-5	●	summer	dessert		●		●			



Apples

Malus spp. Some definitions: **Summer apples** ripen in summer, are generally crisp only for a short period, do not store well, and are often best for cooking. **Fall apples** store longer and are useful for a wide variety of purposes. **Winter apples** ripen mid to late fall, store well, and reach their best flavor after weeks, or even months, of storage. **Dessert apples** are delicious eaten raw. **Subacid** means tart! **Russet** or **russeting** is a skin texture (fairly common on apple varieties and characteristic of a few pears and potatoes) which looks and feels somewhat like suede. **Bloom** is a naturally occurring dust-like film on the skin of some varieties of apples, plums and grapes.

Each variety has a **climate range** where it will thrive and produce its best fruit. At the end of each apple description we list a range of zones. For example, Z3-4 signifies that this apple will reach perfection in Zones 3 and 4 and that we don't recommend it farther south even though it would be plenty hardy. Z4-6 means that this apple will reach perfection in Zones 4, 5 or 6. We suggest that you use this guide to select apples most appropriate to your area.

Choosing a variety: not every variety is right for you. It's not just about what tastes good. They all taste good to someone. It's a case of "different strokes for different folks." **All-purpose** apples are just that. They are good for a bunch of jobs. If I were planting just one tree, I'd start there. However if you're a history buff, consider the historical varieties and maybe plant one that originated nearby. If you don't eat many apples but love pies, go for the pie apples. If you're a dessert connoisseur, skip all the others and go for the highly flavored dessert varieties. Some are strictly for cider. Some are great to put out at the camp for summer use. Some are perfect for those who want fall fruit but don't have winter storage facilities. Others keep all winter and into the following summer. Read the descriptions and check out the chart on page 7. If you have a question about a specific variety, drop me an email. I'll try to help!

Some people wonder why **we graft our apples onto Antanovka standard rootstock**. Standard trees have deep, substantial—and therefore hardier—root systems. By selecting the varieties appropriate to your district, grafted on standard rootstock, you may well be planting a tree that will be picked by your grandchildren's grandchildren. Standard trees will grow to be large, but you can keep them trimmed. My largest trees are now about 25 years old. The tallest are still well under twenty feet.

Although standard-sized apple trees may be planted as close as 10–15' apart, they were typically planted 30' apart in 19th-century orchards. We generally plant trees 20–25' apart with good results.

Apple trees are adaptable to a variety of soils and climates, though they prefer well-drained fertile soil. See pages 4–5 for information on soil preparation and planting. Varieties bearing annually are noted; others normally bear every other year. With diligent annual pruning and thinning, most apples will produce an annual crop, one heavy, the next light.

All apple trees require a second variety for pollination, but any apple or crabapple within a quarter mile will probably do. (We provide 3½ to 6' trees.)

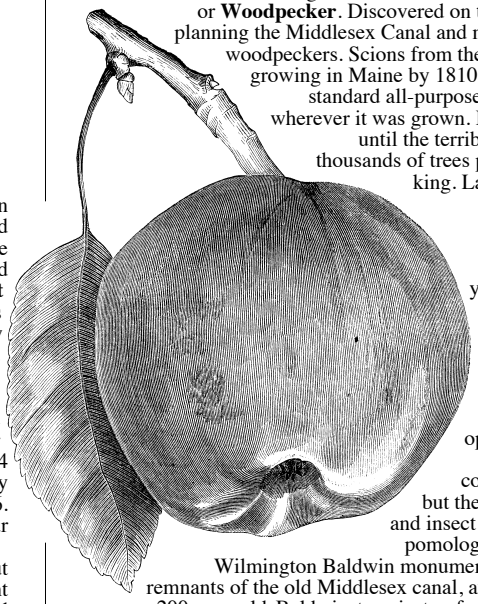
ME Grown = grown in Maine by a member of the Fedco growers coop.

Ashmead's Kernel Winter. Unknown parentage. Gloucester, England, about 1700. Possibly a seedling of Nonpareil. An after-dinner apple of unparalleled quality. Not for those who like mild sweet apples. Each bite is an intense aromatic sting of sharp and sweet, with hints of other indescribable but absolutely wonderful tastes and aftertastes. This apple could be served as dessert at the fanciest gathering of your most discerning friends. Beginning to show up here and there in commercial orchards. Makes a top-quality hard cider, blended or alone. Medium-small oblate and lopsided orange-gold-green russet fruits. Ripens in October. Store until New Year's to reach perfection. Keeps until they're all gone. Moderately vigorous tree may bear irregularly, but it's worth the wait. Somewhat scab resistant. Blooms midseason. Z4-7. **ME Grown.**

0028 Ashmead's Kernel, $22.00

Aunt Penelope Winslow Fall. Unknown parentage. The story goes that the apple was brought to Maine's North Haven Island from Marshfield, MA, by "Aunt" Penelope Winslow well over 200 years ago. Medium-sized slightly ribbed roundish fruit, furrowed at the basin, with pronounced red stripes and blush. All purpose. Good fresh eating. Makes a very thick rich yellow slightly tart delicious sauce. I first learned of the apple from Len Alexander of Chelsea, ME, whose family has deep roots on North Haven. Some years later I met Gil Foltz who lives on the island and has spent a great deal of time exploring for old trees. Gil led me to the last old island tree when Cammy and I visited in 2007. Many thanks to Gil and to James S. Brown for providing scionwood from his huge tree. Fruit keeps until early January. Some minor scab on un-sprayed fruit. Z4-7. **ME Grown.**

0039 Aunt Penelope Winslow, $22.00



Baldwin Winter. Wilmington, MA, about 1740. Also called **Butters Apple** or **Woodpecker**. Discovered on the Butters Farm by a surveyor planning the Middlesex Canal and noted as a favorite site for local woodpeckers. Scions from the original tree were grafted and growing in Maine by 1810, and by 1850 Baldwin was the standard all-purpose home and commercial variety wherever it was grown. It remained dominant in Maine until the terrible winter of 1934 when tens of thousands of trees perished and McIntosh became king. Large round-conic thick-skinned fruit. Light yellow skin almost entirely blushed, mottled and striped with red and deep carmine. Hard crisp juicy yellowish flesh makes excellent eating and keeps till spring. Vigorous adaptable hugely productive long-lived healthy tree. When grower Dave Gott asked the late renowned entomologist Ron Prokopy his opinion of Baldwin, Ron replied that the apple is "not practical commercially due to biennialism but the *only* apple that is both disease and insect resistant." One of last winter's pomological highlights was visiting the Wilmington Baldwin monument just a stone's throw from the remnants of the old Middlesex canal, after collecting scionwood from a 200-year-old Baldwin tree just a few miles away. Massachusetts' most famous apple where it grows to perfection. Also extremely nice here in central Maine. Hardiest in well-drained upland and north slopes. Blooms early to midseason. Z4-6. **ME Grown.**

0045 Baldwin, $22.00

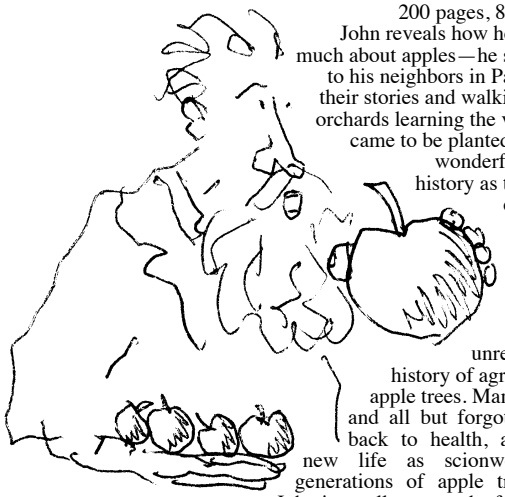
Belle de Boskoop Winter. Probably a chance seedling from Holland, 1860. May also be a synonym or mutation of Montfort. Every chef in Europe knows Boskoop. It cooks beautifully. Long the farm apple of Europe; every backyard had a Boskoop. Big blocky somewhat lumpy green fruit largely patched and netted with russet. Sometimes a brownish reddish blush. Cooks up quickly into a nice sauce: yellow, soft and medium tart. Grower David Maxwell of Nova Scotia calls it, "an absolutely outstanding apple…seemingly resistant to everything. I didn't spray them at all and they are absolutely clean. The taste is equally outstanding." Quite tart right off the tree. However, after storage, the acidity softens and it becomes a very good table apple. Keeps well. Robust, strong-growing tree. Blooms early. Triploid, not a pollinator for other varieties. Z4-6. **ME Grown.**

0063 Belle de Boskoop, $22.00

Black Oxford Winter. Unknown parentage. Paris, Oxford County, ME, about 1790. This outstanding apple, a favorite long ago around much of Maine, has been making a huge comeback in the last 20 years. Our best seller until Honeycrisp came along. Medium-sized round fruit, deep purple with a blackish bloom. From a distance you might think you'd discovered a huge plum tree. A 200-year-old Black Oxford tree still grows in Hallowell, and still bears large crops. Excellent pies, superb late cider. Leave the skins on for a delightful pink sauce. Best eating late December to March. They seem to get sweeter and sweeter as the months go by. Good cooking until early summer. Some insect and disease resistance. Unusual light pink blooms, late to midseason. Z4-5. **ME Grown.**

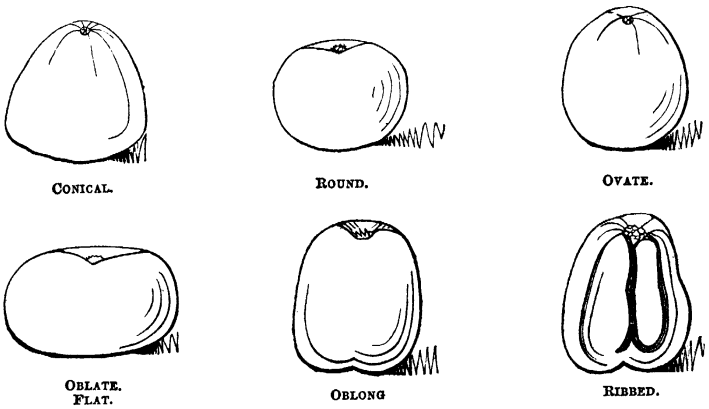
0077 Black Oxford, $22.00

Not Far from the Tree: A Brief History of the Apples and the Orchards of Palermo, Maine, 1804-2004 by John Bunker,



200 pages, 8½ x 11, softcover. John reveals how he came to know so much about apples—he spent years talking to his neighbors in Palermo listening to their stories and walking their fields and orchards learning the varieties, how they came to be planted there and why. A wonderful lesson in Maine history as told by apples. His engaging narrative and entertaining and informative drawings take us into the rich diverse past of a seemingly unremarkable town. A history of agriculture told in the apple trees. Many long abandoned and all but forgotten, some nursed back to health, and some finding new life as scionwood that begets generations of apple trees from Fedco. John is a colleague and a friend and I confess that I am not a disinterested reviewer. I even have a tiny part in his story—I taught him how to make an apple pie. John's love of apples and affection for his neighbors and town speak clearly through each page. Copiously illustrated in John's unmistakable style.
–David Shipman
We will donate $5 from the sale of each book to the Palermo Historical Society. Also available year-round from Organic Growers Supply.

7509 Not Far from the Tree, $22.00



Crimson Beauty Summer. Fameuse x New Brunswicker. Upper Woodstock, New Brunswick, Canada, c. 1850. Originally named Early Scarlet; also known as Early Red Bird. Extremely early medium-sized roundish-conic crisp juicy tart red fruit, well suited to the extreme north. Even earlier than Yellow Transparent (#**1214**). In 2008 we picked the crop on July 31. Makes sauce in 2 minutes or less which is pink, creamy and tart, but not too tart to eat straight with no sugar. Rare but still remembered fondly in northern Maine and New Brunswick. Selected from over 2000 Fameuse and New Brunswicker crosses made by eccentric genius Canadian plant breeder Francis Peabody Sharp (1823-1903) at his nursery in Upper Woodstock. Sharp was the most important figure in bringing fruit-growing to northern Maine, breeding and testing thousands of apples, plums and other fruits. No scab. Blooms midseason. Z3-4. **ME Grown.**

0185 Crimson Beauty, $22.00

Duchess of Oldenburg Late Summer. Russia, 17th c. Also called **Duchess**. In 1835 the Massachusetts Horticultural Society imported the first of many apple varieties from Russia. These were Alexander, Tetofsky, Red Astrichan and Duchess of Oldenburg. Duchess was planted extensively wherever growers needed extreme hardiness and is still quite popular in most of northern New England. Aroostook County's favorite apple. Thought to be a parent of the famous Canadian variety New Brunswicker and parent of Dudley Winter (#**0220**). Medium-sized round red-striped fruit is irregularly splashed and mottled with crimson. Yellow firm fine-grained crisp tender juicy subacid aromatic flesh. Highly esteemed for all sorts of cooking; Duchess is one of the best pie apples for coldest districts. Makes a pie with a tart flavorful zip and cooks up quickly into thick creamy delicious sauce. Prolific precocious small to medium-sized adaptable tree. Duchess seedlings are used as an extremely hardy rootstock called Borowinka. Scab resistant. Z3-4. **ME Grown.**

0216 Duchess of Oldenburg, $22.00

Centennial Late Summer. MN 1472 (Dolgo x Wealthy). U Minn, 1957. An unusually high-quality oval crab, about the size of a small plum. Most agree it is outstanding for fresh eating. Good in sauce too. Tender crisp juicy slightly spicy tart light orange flesh. Very highly flavored. Not sweet. Competes with Trailman for the best-flavored crab. Shiny smooth mottled red-pink-orange-yellow skin with a thin purplish blush. Productive naturally small compact tree named in honor of Minnesota's admission to the Union in 1858. Highly scab resistant. Blooms early. Extremely hardy. Z3-5.

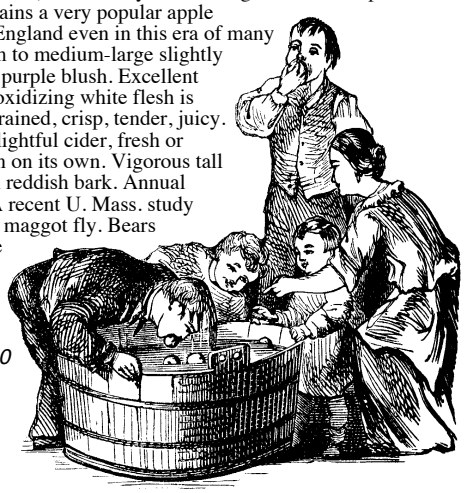
0127 Centennial, $22.00

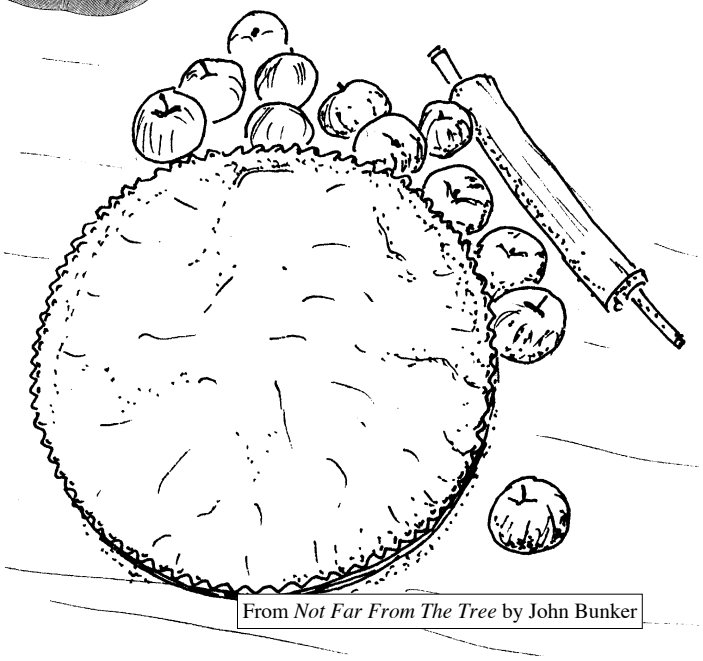
Chestnut Early Fall. MN 240 (Malinda x open-pollinated) U Minn, 1946. A lot of people love this apple. Small golf-ball-sized fruit with truly excellent fresh eating qualities. Yellow and bronze-red skin with some russeting. Firm crisp juicy fine-grained very sweet yellowish flesh. The apple version of Sun Gold tomato—fabulous complex flavor in a small package. For a growing number of people in central Maine, late September is Chestnut apple time. Every year we put out a bushel a day at Fedco's booth at the Common Ground Fair and watch them disappear. Neophytes often look at the fruit with disdain. Most however take one bite and their frowns turn to smiles. (For some, despite its crispness and depth of flavor, it is *too* sweet.) Chestnut needs no sugar to make a sweet and subtle sauce. Not a keeper, but can be stored for a month or so. Vigorous, somewhat weeping, medium-sized productive tree. Disease resistant. Also beautiful in bloom, midseason. Z3-5. **ME Grown.**

0156 Chestnut, $22.00

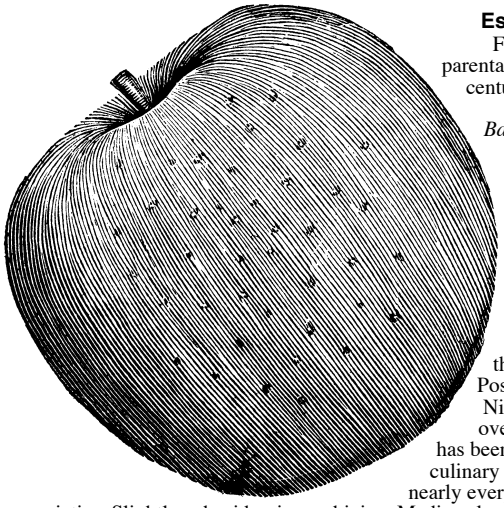
Cortland Fall-Winter. (Ben Davis x McIntosh) NY Stn, 1915. A cross between two commercial giants at the time, one (Ben Davis) on the way out and the other (McIntosh #**0522**) on the way in. Although never as important as McIntosh, Cortland remains a very popular apple throughout northern New England even in this era of many new introductions. Medium to medium-large slightly ribbed dull red fruit with a purple blush. Excellent eating and cooking. Slow-oxidizing white flesh is very good in salads; fine-grained, crisp, tender, juicy. Produces a surprisingly delightful cider, fresh or fermented, in a mix or even on its own. Vigorous tall upright spreading tree with reddish bark. Annual producer of heavy crops. A recent U. Mass. study showed resistance to apple maggot fly. Bears young; remove fruit for the first year or two to avoid stunting growth. Blooms midseason. Z4-5. **ME Grown.**

0170 Cortland, $22.00





From *Not Far From The Tree* by John Bunker



Esopus Spitzenburg Fall-Winter. Unknown parentage. Esopus, NY, 18th century. Herman Melville wrote in his 1853 *Bartleby, the Scrivener*: "Copying law-papers being proverbially a dry, husky sort of business, my two scriveners were fain to moisten their mouths very often with Spitzenbergs, to be had at the numerous stalls nigh the Custom House and Post office." Turkey and Nippers chose well. For over 200 years the apple has been a choice dessert and culinary variety, mentioned in nearly every list of best-flavored varieties. Slightly subacid, crisp and juicy. Medium-large bright-red round to mostly conic fruit, covered with russet dots, not unlike a slightly more conical Starkey. Excellent acid source for sweet or fermented cider. Moderately vigorous tree, with easily trained wide-angle branches. Bears moderate crops. Susceptible to scab though I don't spray mine and have been happy with the fruit quality. Blooms mid to late season. Z4-7.

0245 Esopus Spitzenburg, $22.00

Fameuse Early Fall. Unknown parentage. Canada, before 1700. Also called **Snow**. Excellent eating, sauce and cider apple. The 1865 Department of Agriculture yearbook sums it up: "Flesh remarkably white, tender, juicy…deliciously pleasant, with a slight perfume….No orchard in the north can be counted as complete without this variety;…it is just so good that everybody likes to eat of it; and when cooked, it is white, puffy, and delicious." Medium-small roundish ruby-red thin-skinned fruit. Tender snow-white flesh, aromatic, juicy, sweet and tart. Famous in Maine for over 150 years and still found in Maine dooryards and orchards. Keeps until late December. Thought to be a parent of McIntosh (#**0522**). As one of the few apples that comes relatively true-to-type from seed, occasional "variations on a Fameuse theme" can be found in old orchards. Upright-spreading rather vigorous moderately tall very productive long-lived tree. Susceptible to scab. Blooms mid-late. Z3-5. **ME Grown.**

0260 Fameuse, $22.00

Fireside Winter. (McIntosh x Longfield) U Minn, 1943. Very hardy, excellent all-purpose keeper, recommended for fresh eating (dessert), salads, sauce and baking. Holds shape in a pie, even dries well. Very large, round to oblate, shiny light-red fruit with darker red and orange stripes and splashes. Firm crisp juicy yellow flesh is mild, approaching sweetness. Stores very well. Waxy surface—doesn't dehydrate in the root cellar. Very popular in the Upper Midwest: sometimes called **Minnesota Delicious** but we don't hold that against it! Highly productive vigorous broadly spreading somewhat upcurving tree. Likely named to commemorate Franklin Delano Roosevelt's 26 "Fireside Chats" given between March 1933 and June 1944. Blooms mid-late season. Z3-5.

0266 Fireside, $22.00

Freedom Late Summer-Early Fall. [NY 18492 (Macoun x Antanovka)] x NY 49821-46 [Golden Delicious x F2 26829-2-2 ((Rome x *M. floribunda* 821) x (Rome x *M. floribuna* 821))] NY Stn, 1983. All-purpose apple from the same breeding program that focuses on disease-resistant varieties and developed Liberty (#**0475**). Medium-large round-conic smooth-skinned fruit entirely covered with bright-red stripes. Juicy firm spicy-flavored flesh. Keeps until early January. Vigorous spreading productive annually bearing precocious tree. Considered to be scab immune. Recommended as a pollinator for other varieties. Blooms midseason. Z4-7. **ME Grown.**

0280 Freedom, $22.00

Frostbite Fall-Winter. MN 447. Uncertain parentage. U Minn, 2007. Seed planted at the University of Minnesota before 1936, but unnamed until 2008. This massively flavored dessert apple—not for the faint of heart—provides a whole new level of culinary experience. Likely the most distinctive and unusual apple I've ever tried. Descriptions shouted out by tasters at the 2008 Common Ground Fair included, paraffin candy, plum, black raspberry, lollipop, gooseberry, rhubarb, and "new age." Not well suited to fermentation due to its low sugar content (S.G. 1.044), but perhaps that's why, as one fairgoer commented, "those who like it really like chocolate!" The roundish fruit is medium-sized and entirely covered with dark bluish-purple stripes. The aromatic crisp crystalline flesh is an apricot-orange color with occasional red staining, and so juicy it'll run down your hand. Will fruit nearly every year. Not recommended for warmer districts: one Indiana grower calls it "Frost Bitten." Blooms midseason. Z4-6. **ME Grown.**

0282 Frostbite (MN 447), $23.00

Garden Royal Late Summer-Early Fall. Unk parentage. Sudbury, MA, about 1790. AJ Dow the 1860 edition of his *Fruits and Fruit Trees America*, calls this dessert apple "very tender, rich, vinous, aromatic, a beautiful and excelle fruit." I agree 100%. On a good year in our ya Garden Royals are perfectly balanced and hig flavored. Aptly named, it is truly regal. With t enthusiastic assistance of Sudbury residents M and Helen Crary, we are hoping to begin repopulating Sudbury with Garden Royals this coming spring. Small to medium-sized round-conic fruit is deep red with prominent w dots. No scab. Blooms midseason. Z4-6. **ME G**

0291 Garden Royal, $22.00

Golden Russet Winter. Uncertain origin. Thought to be from England, New York or Ne England. The champagne of cider apples, ripening late in fall, when the root cellar has finally cooled off and the best cider is ready to made: sweet, balanced, thick and smooth. Also recommended as a "sharp" acid source for fermented cider. Excellent eating; keeps all winte well into spring. Round medium-sized hard fruit; uniform in size and shape, softens as winter progresses but maintains its superior sweet flavor. Solid deep yellow *golden* russeted skin! Medium to large vigorous diverging upcurving tree with silvery-green leaves on long willowy branches. This is what we consider to be the true Golden Russet; our scionwood came from the apple repository in Geneva, NY, some 25 years ago. Scab resistant. Blooms early to midseason. Z4-6.

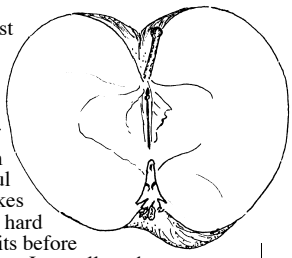
0319 Golden Russet, $22.00

GoldRush Winter. Coop 38 {PRI 2750-6=[Coop 17 (PRI 1689-100) x Golden Delicious]}. PRI Coop, 1994. The first of the new disease-resistant varieties from the well-known Purdue-Rutgers-Illinois apple breeding program to have superior storage qualities. Not only that, but it's probably *the* best-tasting apple to come out of that program. Love those Golden Delicious qualities! Medium to large round-conic fruit. Uniform deep greenish-yellow opaque chewy skin turns golden in storage. Creamy white green-flecked flesh is hard, very crisp, juicy and tart. A solid apple with excellent flavor. Serve them for dessert in February and March and no one will be disappointed. Ripens very late in fall, but will usually do so successfully in central Maine. Keeps until early May in the root cellar. Very precocious. Highly resistant to scab and powdery mildew. Moderate fireblight resistance. Moderately vigorous tree with a strong central leader blooms midseason to late. Z4-6. **ME Grown.**

0329 GoldRush, $22.00

T-shirt What a combination! John Bunker illustrates Mark Twain on an unbleached 100% cotton crewneck. Ecru shirt has black design highlighted by red apples. Printed in Maine.

7511 T-shirt medium, $12.00
7512 T-shirt large, $12.00
7513 T-shirt extra-large, $12.00



Grimes Golden Fall. Unknown parentage. West Virginia, c. 1804. All-around excellent variety grown in old Maine orchards for over 100 years. Medium-sized roundish fruit with opaque yellow skin, scattered with grey russet dots and an occasional faint blush. Thought to be a parent of Golden Delicious. Tart citrusy crisp dense firm fruit is excellent for dessert and cooking: wonderful spicy fresh eating and wonderful apple sauce. Makes a thick sweet cider and a good single-variety hard cider: light and fruity. Tends to begin dropping fruits before you can pick them, but fret not; they're ready to eat. Just collect them off the ground as they fall and use them up. Then pick the rest off the tree and store in the root cellar until spring. Productive, annual bearing, precocious. Highly recommended. Z4-8. **ME Grown.**

0355 Grimes Golden, $22.00

Haralson Winter. MN 90 (Malinda x open-pollinated). U Minn, 1923. One of the earliest introductions from the Minnesota Horticultural Research Center and still the most commonly grown apple in Minnesota. Everyone out there knows Haralson. A nearly perfect all-purpose apple for those in northernmost areas. Pleasant sprightly sub-acid flavor for fresh eating, pies, baking, sauce, freezing and cider. Roundish-conic bright red striped to mostly solid red fruit, with moderately conspicuous dots and some russeting. White firm crisp juicy flesh. Highly productive and reliable. Harvest in October, keeps until March. Extremely hardy naturally small tree with a strong central leader and well-formed wide-angled branching habit. Because it sets fruit so heavily, thin some of the small apples to ensure larger fruit size and encourage annual cropping. Fruit quality and size also seems to respond noticeably to better soils. Exhibits resistance to apple maggot, codling moth, cedar apple rust, fire blight, and even scab. Blooms late. Z3-5.

0361 Haralson, $22.00

Honeycrisp Winter. MN 1711 (Keepsake x open-pollinated). U Minn, 1991. Medium-large fruit, described as "explosively crisp," mottled and striped red over yellow. Cream-colored flesh is sweet and juicy with hard snapping-crisp texture. Mild aroma and subacid flavor are top quality in September and improve steadily in storage. Unusual because it ripens in early fall yet keeps up to seven months. First of the many excellent University of Minnesota introductions to receive large-scale commercial attention, now has a huge following. Has become our best-selling apple. Probably best planted north of Massachusetts; has not performed as well in warmer districts. Was always thought to be a Honeygold-Macoun cross until recent DNA testing at U. Minn. revealed at least one of its real parents. Tends towards annual bearing. Relatively small low-vigor upright spreading tree. Above-average scab resistance. Blooms mid-late season. Z3-4.

0386 Honeycrisp, $23.00

Liberty Late Summer-Fall. NY 55140-19 [Macoun x PRI 54-12 (PRI Coop complex cross includes Rome Beauty, Jersey Black, McIntosh, Wealthy and *M. floribunda*)]. NY Stn, 1978. Often cited as the best of the disease-resistant varieties, particularly in the Northeast. Somewhat similar to Macoun. Handsome medium-sized round-conic bluish-pinkish-red apple with crisp white flesh of very good dessert quality when dead ripe. Excellent cooking and cider too. Recommended for single-variety cider. Keeps till late fall. Begins fruit production at an early age, bearing consistent heavy annual crops. Naturally well-structured sturdy tree is easy to care for. Considered to be 100% scab-immune, though not resistant to insects or other lesser apple diseases. Allowing Liberty to crop too heavily at a young age can stunt final tree size and reduce productivity. Even with mature trees, thinning fruit clusters is important to maintain fruit size. Blooms early to midseason. Z4-6. **ME Grown.**

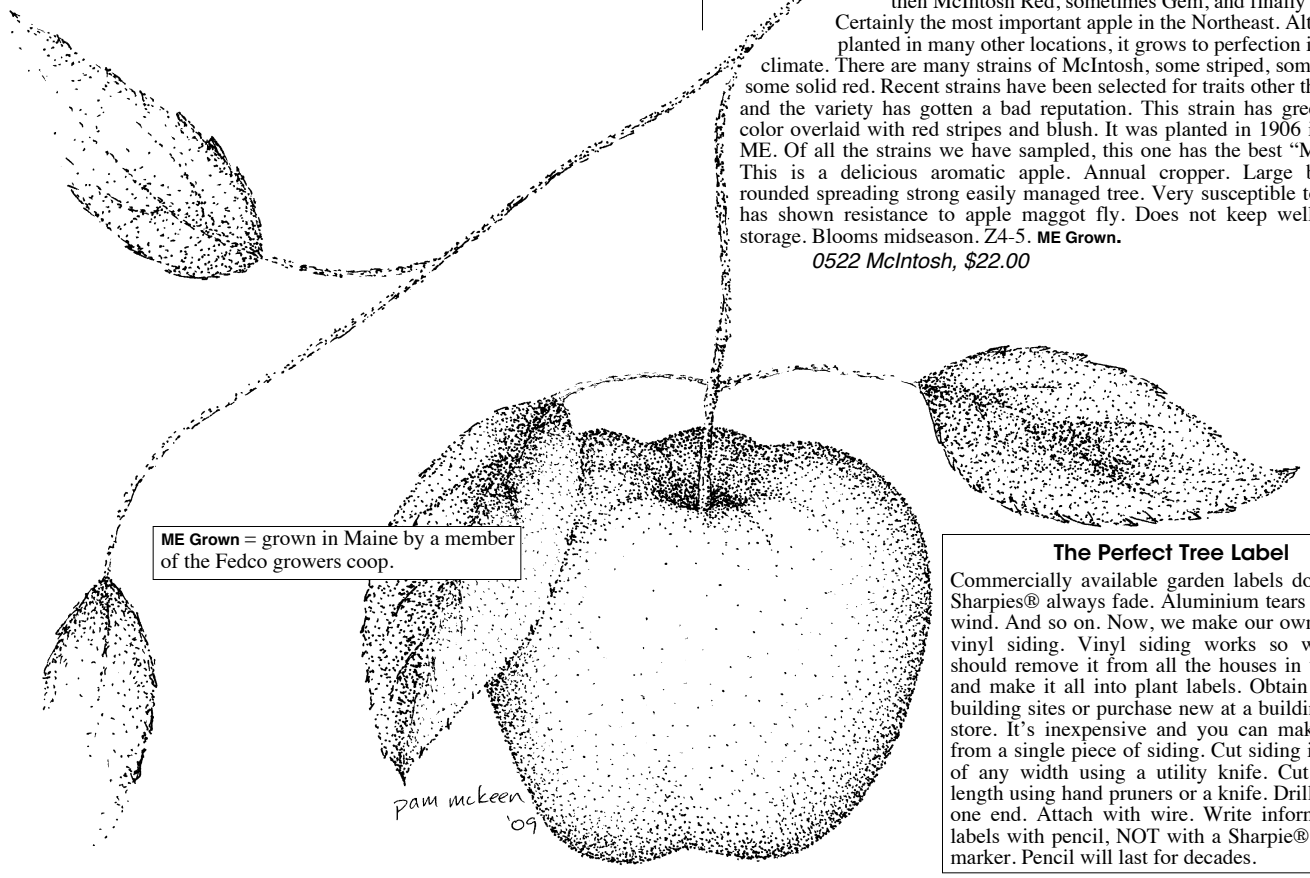
0475 Liberty, $22.00

Macoun Fall. (McIntosh x Jersey Black) NY Stn, 1923. This is an apple with a near cult following even though practically no one seems to know how to pronounce the name. (It rhymes with town, not tune!) Especially good choice for those who like McIntosh and live south of the Maine border where Macs do not reach their prime. Medium-sized ribbed lobed truncate fruit. Dark purplish-red blush mostly covers the green skin. The very white flesh is crisp but not really hard. The rich flavor is sweet and aromatic. Very juicy. Excellent for fresh eating. Somewhat vigorous, upcurving tree with stout curved branches may require some training. Not tall. Moderately productive. Thinning the young fruit will help maintain larger fruit size. Although susceptible to scab, the fruit appears to be less affected than McIntosh. The fruit also appears to show some natural resistance to insect damage. Blooms mid-late season. Z4-6. **ME Grown.**

0497 Macoun, $22.00

McIntosh Fall. Thought to be a seedling of Fameuse or perhaps St. Lawrence x Alexander. Dundela, Ontario, 1811. First discovered by John McIntosh on his farm near the St. Lawrence River in 1811. Originally called Granny's Apple, then McIntosh Red, sometimes Gem, and finally McIntosh. Certainly the most important apple in the Northeast. Although not planted in many other locations, it grows to perfection in our cool climate. There are many strains of McIntosh, some striped, some blushed, some solid red. Recent strains have been selected for traits other than flavor, and the variety has gotten a bad reputation. This strain has green ground color overlaid with red stripes and blush. It was planted in 1906 in Mercer, ME. Of all the strains we have sampled, this one has the best "Mac" taste. This is a delicious aromatic apple. Annual cropper. Large beautifully rounded spreading strong easily managed tree. Very susceptible to scab but has shown resistance to apple maggot fly. Does not keep well in home storage. Blooms midseason. Z4-5. **ME Grown.**

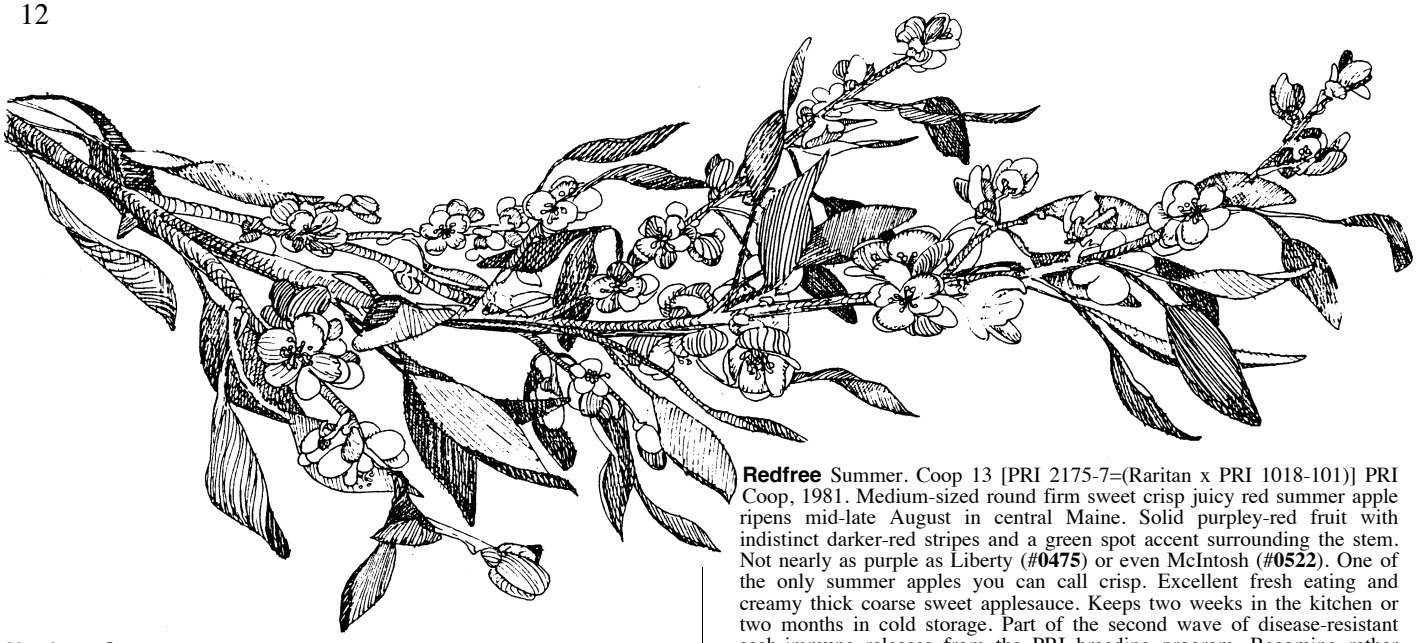
0522 McIntosh, $22.00



ME Grown = grown in Maine by a member of the Fedco growers coop.

The Perfect Tree Label

Commercially available garden labels do not last. Sharpies® always fade. Aluminium tears off in the wind. And so on. Now, we make our own. We use vinyl siding. Vinyl siding works so well, they should remove it from all the houses in the world and make it all into plant labels. Obtain scraps at building sites or purchase new at a building supply store. It's inexpensive and you can make dozens from a single piece of siding. Cut siding into strips of any width using a utility knife. Cut strips to length using hand pruners or a knife. Drill a hole at one end. Attach with wire. Write information on labels with pencil, NOT with a Sharpie® or magic marker. Pencil will last for decades.



Northern Spy Winter. Chance seedling. East Bloomfield, NY, about 1800. A bronze plaque marks the site of the original tree of this former commercial giant, still a renowned Maine favorite. Very large delectable all-purpose fruit has yellow background covered all over with pink and light red stripes and wash. Very juicy and tender. Even when the tender skin bruises, the fruit keeps extremely well. Makes an excellent pie and cooks up quickly into a loose coarse mild sauce. Medium-to-large moderately vigorous slightly upcurving late-blooming long-lived tree. Its one drawback is being slow to come into bearing, although for us it has been worth the wait. Prefers fertile well-drained soil. Good scab resistance. Leafs out late and blooms late season. Z4-6. **ME Grown.**

0621 Northern Spy, $22.00

Opalescent Fall. Ohio, 1899. Highly flavored dessert apple. Biting into the very large brilliant deep red fruit will bathe your tongue with flavor. It's crisp, it's sweet, it's tart, it's juicy—but most of all it's supremely flavorful. Although considered to be a good cooking apple as well, I find that it's best as a dessert fruit. Every so often I meet someone who knows Opalescent and all agree: it's got great flavor. Likely at its best from Massachusetts north. Will keep till mid-late winter. The ancient two-thirds-broken-down tree up the road by the Palermo ball field still pumps out a decent crop every year. Now we've got it here on the farm as well. Vigorous medium-sized annually producing tree. Blooms midseason. Z4-6. **ME Grown.**

0646 Opalescent, $22.00

Pewaukee Fall-Winter. Duchess x Northern Spy. Pewaukee, WI, about 1870. Medium-sized dull yellowish greenish-red fruit. Very distinctive because of the pronounced "lip" usually found next to the stem. Has pretty much no cavity at all. Easy to identify once you've seen one or two. Typically grown in old New England orchards, ancient trees can still be found now and then all across the northern districts. Not a dessert fruit. Cooks up fairly quickly into a light yellow fairly smooth applesauce with a nice tart flavor. Productive. Keeps until late January. Tree is very long-lived and hardy, though not as hardy as Wealthy (#**1130**). Z3-5. **ME Grown.**

0696 Pewaukee, $22.00

Pomme Grise Early Fall. Unknown origin. Probably brought to the St. Lawrence Valley in Canada by French immigrants and may have originated in Europe as early as the 17th c. Found its way into Maine about 150 years ago. Small oblate russet with a longtime reputation as one of the very best dessert apples. Firm, crisp, juicy, rich, sub-acid and aromatic, with interesting after-tastes. Superb fresh eating. Smooth skinned and mottled russet with greenish patches, and scaly areas of shinier russet. Not so opaque as others. The combination of the chalky russet and the green ground color give it its grey (grise) appearance. Vigorous dense round spreading annual-bearing tree prefers northern locations. Keeps fairly well some years. Still crunchy in January. Z3-5. **ME Grown.**

0710 Pomme Grise, $22.00

ME Grown = grown in Maine by a member of the Fedco growers coop.

Redfree Summer. Coop 13 [PRI 2175-7=(Raritan x PRI 1018-101)] PRI Coop, 1981. Medium-sized round firm sweet crisp juicy red summer apple ripens mid-late August in central Maine. Solid purpley-red fruit with indistinct darker-red stripes and a green spot accent surrounding the stem. Not nearly as purple as Liberty (#**0475**) or even McIntosh (#**0522**). One of the only summer apples you can call crisp. Excellent fresh eating and creamy thick coarse sweet applesauce. Keeps two weeks in the kitchen or two months in cold storage. Part of the second wave of disease-resistant scab-immune releases from the PRI breeding program. Becoming rather popular in Maine. It frequently turns up in smaller commercial orchards and here and there in farmers' markets. Vigorous somewhat upright habit. Scab immune. Blooms midseason. Z4-6. **ME Grown.**

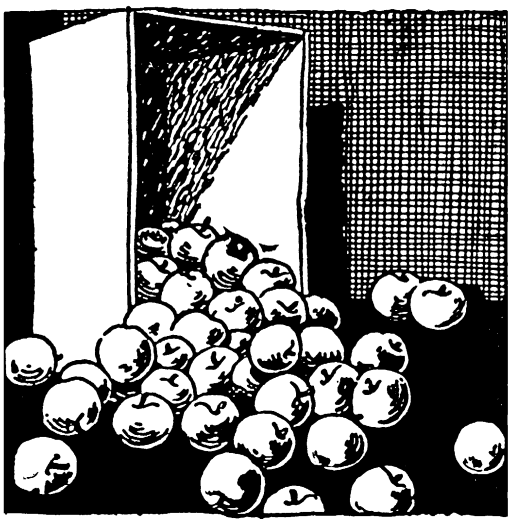
0810 Redfree, $22.00

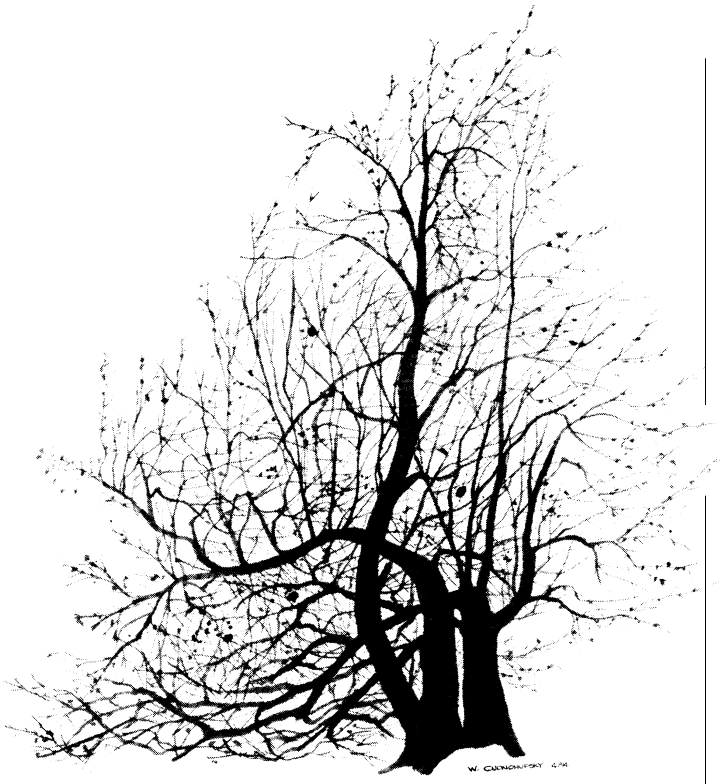
Rhode Island Greening Fall-Winter. Green's Inn, near Newport, RI, about 1650. Also known as **Greening**. One of the most important apples of the 19th century and *the* classic New England cooking apple. Also excellent for fresh eating. In fact it's excellent at everything, including pies. Large green fruit usually has a brownish blush. Light yellow-green flesh is crisp and tart. The tree itself will grow to be rather large with lower branches that may weep slightly. Prune to have the first scaffold relatively high; too low and you might find your fruit growing on the ground. Due to its high-quality fruit and adaptability to a range of soil conditions, this apple eventually became popular all over New York and New England. Keeps until late winter. Less hardy than Baldwin (#**0045**) and may not do well north of central Maine. Susceptible to scab; keep it open and airy. Late-season bloomer. Z4-7. **ME Grown.**

0825 Rhode Island Greening, $22.00

The Root Cellar is one of the greatest of all inventions. High humidity and low—but not freezing—temperatures are key. Keep out rodents. Soil or gravel floor. Our small (8x12') root cellar holds over 40 bushels of apples, carrots, beets, potatoes, cabbages, cider, and more. Two levels of 20" shelves line either side of the door, wide enough for bushel boxes to fit side by side. Concrete and stone walls, 8" thick, were laid up with the "Nearing form" method and a 6" thick reinforced concrete ceiling. An inner and an outer door set three feet apart with an "air lock" between. Doors should be wide enough to admit a wheelbarrow and a rolling cider barrel. We leave the doors open on fall nights to bring the temperature down rapidly. A root cellar can also be incorporated into a new or existing basement. For detailed information, see *Root Cellaring* by Mike and Nancy Bubel, available in the Organic Growers Supply section of the Fedco Seeds catalog.

We do not have separate rooms for potatoes and apples. We also do not store items in sand, leaves, etc. Everything goes into bushel boxes *as is*. As long as humidity is high and temperatures low, your goods will do fine. We periodically go through and throw out any rotting produce. Using a root cellar, we're able to eat our home-grown produce until late spring and beyond. I've eaten apples on July 4th! They looked pretty good; tasted kind of mushy though.





Stark Winter. Delaware County, Ohio, about 1850. A Baldwin (#**0045**) look-alike that was fairly commonly grown in northern districts 100 years ago. Large blocky dull reddish-green fruit. Probably hardier than Baldwin though not as hardy as another old Baldwin alternative, Milden. Trees can still be found in central Maine. Not of Baldwin dessert quality, but very good for cooking and drying. Ruth Smith from York Harbor wrote to me years ago about Stark, "I was always amazed at the color and thickness of the applesauce. I had to add a lot more water than the usual apple needed. It was very tart applesauce." According to Hedrick in his *Cyclopedia of Hardy Fruits*, the tree is "vigorous, hardy, healthy, productive, and very accomodating as to soils." Keeps until April at least. Not to be confused with Starkey (#**0955** below) or the famous Stark Brothers' Nursery. Midseason bloomer. Z4-5. **ME Grown.**

0952 Stark, $22.00

Starkey Fall-Early Winter. Seedling of Ribston Pippin. Vassalboro, ME, 1820. My favorite fall fresh-eating apple, its exquisite combination of crisp sweetness and tartness reminiscent of a perfectly ripe Concord grape. Medium-sized roundish fruit is rosy red, covered almost completely with fine lines, shades and stripes of darker reds and sprinkled with pronounced white dots. Tendency towards biennial bearing although it will produce a crop every year if pruned and thinned. Keeps well into winter. I begin to get into them in late September, with perfect eating being just about New Year's. Still quite decent in February. Originated on the farm of Moses Starkey, a Quaker minister in North Vassalboro. Listed in *The Apples of New York* but never got much notice outside central Maine where it was once popular. Annually bearing tough medium-large tree. Blooms early to midseason. Z4-5. **ME Grown.**

0955 Starkey, $22.00

Sweet 16 Early Fall. MN 1630 (MN447 x Northern Spy) U Minn, 1979. Whenever anyone eats a Sweet 16 for the first time, you know they will be surprised. Fine-textured crisp flesh contains an astounding unusually complex combination of sweet nutty and spicy flavors with slight anise essence, sometimes described as cherry, vanilla or even bourbon. I always love Sweet 16 season. Truly excellent fresh eating, although it is too sweet for some palates. Round-conic bronze-red medium-sized fruit, striped and washed with rose-red. Annual bearer if thinned. Very hardy moderate-sized vigorous vase-shaped tree grows upright with willowy branches that get loaded with fruit but do not break. Grower-friendly. Reaches its best flavor and texture in northern districts. Some resistance to scab. Keeps till midwinter. Blooms midseason. Z3-6. **ME Grown.**

1017 Sweet Sixteen, $22.00

Trailman Summer. Trail x Osman. Beaverlodge Research Farm, Alberta, Canada, 1973. Egg-sized and -shaped crabapple. A personal favorite. Wonderfully flavored: spicy, sweet, exceptionally crisp and crunchy golden-yellow flesh. Visitors who try it here in our orchard usually fall in love instantly. Some have called it the best summer apple they have ever tasted. Small clear-yellow fruit has a porcelain finish, a white bloom and sometimes a brownish-red blush. Ripens about August 20 in central Maine and hangs on the tree for two weeks without softening. Precocious annually productive moderately vigorous somewhat drooping spreading tree. Exceedingly hardy, possibly to Zone 2. Fully hardy in Fairbanks, AK. Might be tasteless south of about Zone 4. Blooms early. Z2-4. **ME Grown.**

1054 Trailman, $22.00

Wealthy Fall. Cherry crab seedling. Excelsior, MN, 1860. A Maine native of sorts, the seed having come from Bangor. Superb all-purpose fall apple, one of the most famous of all hardy varieties. With its perfect texture and complex flavors, Wealthy is considered to be one of *the* best apples. I agree. Our old friend, long-time orchardist Francis Fenton, believes Wealthy—not McIntosh—deserves to be the favorite commercial apple of northern New England. The trees his father planted in Mercer 103 years ago are still going strong. Round-oblate medium-sized fruit is pale greenish-yellow streaked with carmine. About as firm as McIntosh. Tender very juicy sweet subacid flesh is white, often stained red. Good eating and even better cooking. Wonderful pies! Good acid source for fermented cider. Ripens over a long period. Productive moderately vigorous long-lived small to medium-sized tree. Blooms early. Z3-4. **ME Grown.**

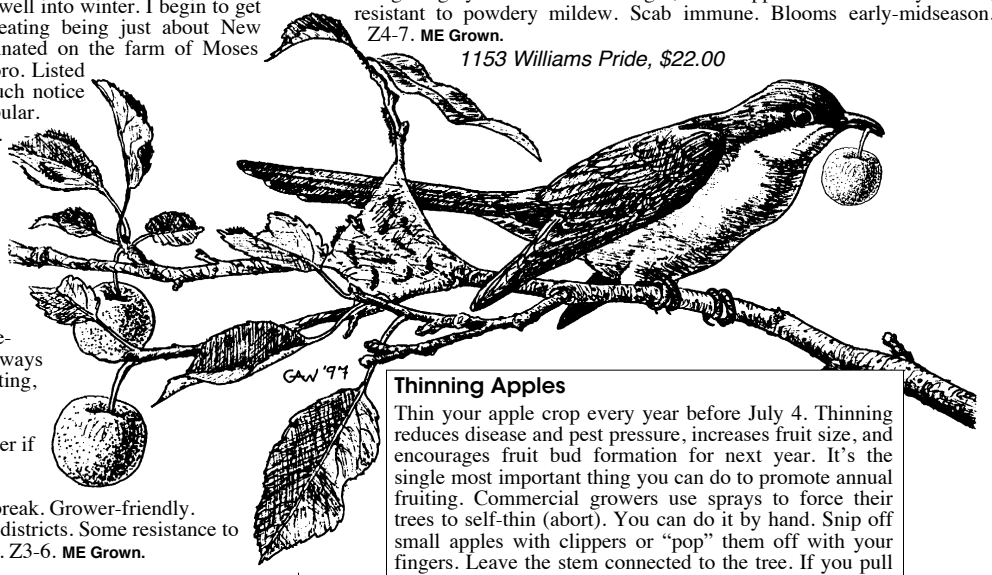
1130 Wealthy, $22.00

Wickson Fall. Spitzenburg x Newtown. Albert Etter introduction. Humboldt County, CA, 1944. One of the most highly flavored apples we list. Small roundish blushed bright red fruit is crisp, juicy, tart, tangy and spicy. Extremely high in both sugar and acid. Sugar level of the juice is around 25%. Highly recommended for dessert, juice, and as a sharp acid source in fermented cider. In September, the tree looks like a mass of cherries. The unsung and generally unknown Albert Etter, who introduced Wickson as a champagne variety, was one of the great 20th-century plant breeders. He also introduced Fairfax, usually considered to be the best-flavored of all strawberries. Although now apparently lost forever, Fairfax lives on as one of the parents of the much-beloved Sparkle. Wickson bears young, heavily and annually. Blooms midseason. Z4-8. **ME Grown.**

1145 Wickson, $22.00

Williams Pride Summer. Co-op 23 [PRI 2845-1=(PRI 1018-101 x NJ50)] PRI Coop, 1988. Probably the most popular summer apple among the newly developed disease-resistant introductions. It's actually crisp, which is rare that time of year. Deep solid purple roundish-conic irregularly shaped fruit, highlighted with areas of glowing rosy red and covered with a thin bloom. Light cream-colored flesh, with red staining just under the skin, is firm, crisp and very juicy, with a nice acidic blend of tart and sweet, reminiscent of Fameuse. Long ripening period means you don't have to eat them all at once. Vigorous annually bearing tree with some biennial tendency, well-shaped with strong right-angled branches that do not require careful training. Highly resistant to fireblight, cedar apple rust and sooty blotch, resistant to powdery mildew. Scab immune. Blooms early-midseason. Z4-7. **ME Grown.**

1153 Williams Pride, $22.00



Thinning Apples

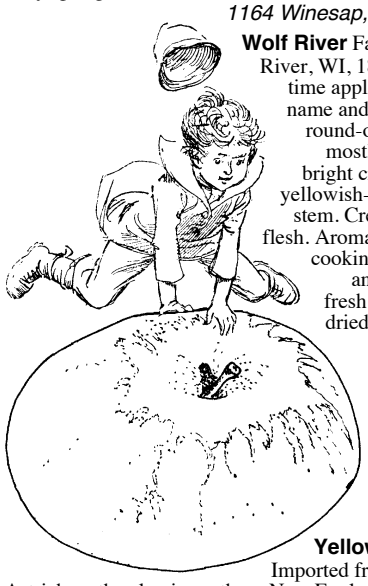
Thin your apple crop every year before July 4. Thinning reduces disease and pest pressure, increases fruit size, and encourages fruit bud formation for next year. It's the single most important thing you can do to promote annual fruiting. Commercial growers use sprays to force their trees to self-thin (abort). You can do it by hand. Snip off small apples with clippers or "pop" them off with your fingers. Leave the stem connected to the tree. If you pull off the entire stem, the remaining fruit may weaken, detach, and wind up on the ground. Leave 2–3 fruit per cluster. Space clusters about 3–4" apart.

Winekist Summer. Unknown parentage. Morris Towle introduction, Winthrop, ME, 20th c. A very high-quality red-fleshed all-purpose fruit. Medium-small and wine red with areas and stripes of darker red and very small white dots; the overall effect is dark red by mid July. Very juicy coarse firm flesh is almost solid beet red: a real eye popper! Ripens about September 10 in central Maine. Very decent for fresh eating and a great addition to cider or sauce. Leaves are tomentose (soft and woolly) and have a dark reddish cast to them. Blossoms are light pink. Wood, when you cut into it, is pink. Tree is a natural semi-dwarf. Developed by the orchardist and variety collector Morris Towle (1911-1993). Bears young and annually. Blooms midseason. Extremely rare. Z4-6. **ME Grown.**

1162 Winekist, $22.00

Winesap Winter. Heirloom of uncertain origin, possibly western NJ. One of the oldest and most revered of all American varieties. Conic and somewhat rounded fruit is almost entirely covered with reddish blush and deeper red stripes, sometimes with a prominent pinkish russet splash and some red russet netting. True to its name, one of the best for cider. Tart reddish juice. Also considered outstanding for pies. Although not normally associated with northern New England, over the years many old-timers have told me about trees they remember from their youth and old trees can still be found here and there. Adaptable to many soils and climates. Keeps until early spring. Z4-7. **ME Grown.**

1164 Winesap, $22.00



Wolf River Fall. Alexander seedling. Near Wolf River, WI, 1875. Perhaps the most famous old-time apple in Maine, likely due to its catchy name and its extremely large—even huge—round-oblate fruit. Pale yellow-green skin mostly covered with pink, deep red and bright crimson. Almost always has a vivid yellowish-greenish russety splash around the stem. Creamy-white coarse firm-but-tender flesh. Aromatic subacid flavor is very good for cooking. Makes an excellent baked apple and a decent pie. Not much good for fresh eating, but particularly tasty when dried. For generations, Perkins Orchard in Monmouth was the sole Wolf River source for the famous baked apples at one of Manhattan's most elite restaurants. Keeps until late fall. Large moderately vigorous productive spreading tree. Excellent scab resistance. Blooms midseason. Z3-5. **ME Grown.**

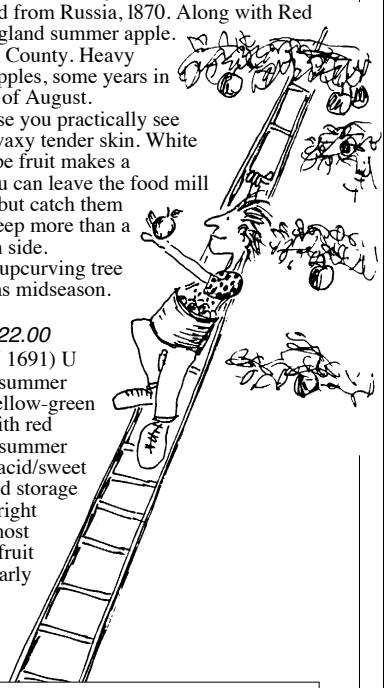
1190 Wolf River, $22.00

Yellow Transparent Summer. Imported from Russia, l870. Along with Red Astrichan, the classic northern New England summer apple. As ubiquitous as Duchess in Aroostook County. Heavy annual cropper of exceptionally early apples, some years in central Maine as early as the first week of August. Presumably called 'Transparent' because you practically see through the clear light yellow smooth waxy tender skin. White juicy sweetly subacid flesh. The soft ripe fruit makes a magnificent purée-type applesauce. You can leave the food mill on the shelf. Can be good fresh eating, but catch them when they're ripe because they don't keep more than a few days. Best about a day on the green side. Moderately vigorous medium-to-small upcurving tree with yellowish bark and foliage. Blooms midseason. Z3-5. **ME Grown.**

1214 Yellow Transparent, $22.00

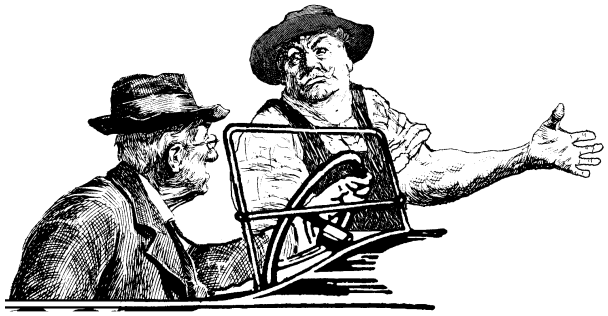
Zestar Late summer. (State Fair x MN 1691) U Minn, 1999. Extremely hardy mid-late summer dessert apple. Large 3" blocky round yellow-green fruit, partially to completely covered with red stripes and solid red. Not your average summer apple—juicy and crisp. Well-balanced acid/sweet flavor tends toward sweet. Keeps in cold storage up to 7 weeks. Moderately vigorous upright form with spur-type habit. One of the most recent releases from the premier hardy fruit breeding program in the U.S. Blooms early season. Z3-5.

1224 Zestar, $22.00



Orchard Ladders

Sturdy lightweight traditionally shaped wooden orchard ladders have wide bottoms for stability and narrow tops for easy handling and placement. Contact the manufacturer:
Peter Baldwin
207-722-3654
baldwin@acadia.net



Where can I taste that apple?

While we pride ourselves with our variety descriptions, there's nothing like the real thing. No words can compare to the taste. Frequently I'm asked, "Where can I taste a ….?" Here are a few suggestions.

Maine:

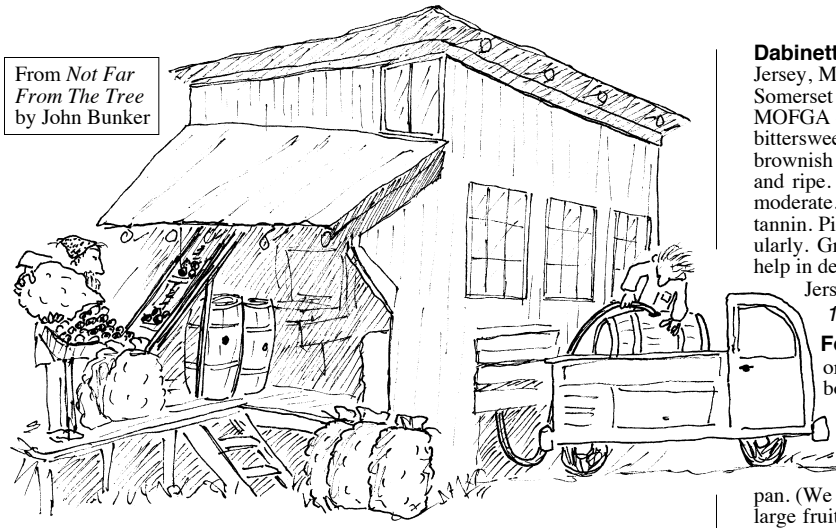
Visit the orchards near you. Call the Maine Dept of Ag at (207) 287-3491 or visit them online at getrealmaine.com for a complete list of the orchards in Maine. Many have unusual varieties. Even one or two rare finds can be worth the trip. Below are a few orchards with wonderful collections. I'm sure there are others. Don't be frustrated if you call and reach no one. Just go. By September most of them are open 6 or 7 days a week.

- Ricker Hill Orchards, Turner, Androscoggin County (207) 225-5552, www.rickerhill.com. Organic apples and more. Collection of young heirlooms includes most of the Fedco list. Some should be fruiting in a year or two.
- Sweetser's Apple Barrel and Orchards, Cumberland Center, Cumberland County (207) 829-3074, www.maineapple.com. A great collection of old and new varieties. Their pride and joy is an ancient Rolfe tree. Don't miss it.
- Bailey's Orchard, South Windsor, Lincoln County (207) 549-7680. One of the largest collections of old varieties in the state.
- Lakeside Orchards, Manchester, Kennebec County (207) 622-2479, www.lakesideorchards.com. Organic apples and a good collection of mostly new varieties.
- Rollins Orchard, Garland, Penobscot County (207) 924-3504. A very good collection of unusual old varieties.
- Sandy River Orchard, Mercer, Somerset County (207) 587-2563. Francis Fenton's huge collection of 100 or more varieties.
- The Apple Farm, Fairfield, Somerset County (207) 453-7656. A great collection of unusual old and new varieties.
- Cayford Orchards, Skowhegan, Somerset County (207) 474-5200. 57 varieties of tree fruit.
- Greensweet, Unity, Waldo County (207) 453-4486. Call first, open weekends, over 50 varieties.
- Sewall's Orchard, Lincolnville, Waldo County (207) 763-3956, www.sewallsorchard.com. Organic apples including some of the first disease-resistant releases.
- Dole's Orchard, Limington, York County (207) 793-4409, www.dolesorchard.com. Mix of old and new. They have two un-named varieties crossed by the late Maine plant breeder Russell Bailey. Both are extremely rare, if not unique.

Other States:

I know a few orchards with good collections outside of Maine. If you know of any we should list, please let us know. An online search could direct you to an orchard nearby.

- Nashoba Valley Winery, Bolton, MA. (978) 779-5521, www.nashobawinery.com. A large collection of old and new varieties.
- Tower Hill Botanic Garden, Boylston, MA (508) 869-6111, www.towerhillbg.org. The best collection of historic varieties in New England. At last count 119, all labeled in an arboretum-type setting. A great place to study the fruit. Usually for sale at a special event over Columbus Day weekend. Call ahead.
- Hutchins Farm, Concord, MA (978) 369-2480. Nice collection of old and mostly newer varieties.
- Old Sturbridge Village, Sturbridge, MA (508) 347-3362, www.osv.org. Apple days: October 3–4, 2009.
- Gould Hill Orchard, Contoocook, NH (603) 746-3811, www.gouldhill.com. Large collection of new and old varieties.
- Poverty Lane Orchards, Lebanon, NH (603) 448-1511, www.povertylaneorchards.com. Likely the best collection of unusual dessert apples in New England. One of the largest collection of cider apples in the U.S. They have all the cider varieties we sell.
- Alyson's Orchard, Walpole, NH (603) 756-9090. Although I've never been there, I've heard they have an extensive collection.
- Scott Farm, Dummerston, VT (802) 254-6868. Large collection of old and new varieties.



From *Not Far From The Tree* by John Bunker

Cider Apples

Early American colonists quickly discovered that barley did not grow well in New England, so fermented cider became the home-grown drink that replaced beer. Cider orchards composed of nameless seedling apples sprang up everywhere and the local cider press became a fixture of every community large, small or tiny. Americans were less discriminating than Europeans about their cider apples. Seedling apples are still referred to as 'cider apples' by old-timers in central Maine. True, a small number of varieties, such as Golden Russet and Hewe's Crab, gained recognition as premier cider fruit, but in England, France and even Spain, dozens of traditional named cider apples can still be found today. These are NOT for fresh eating; in fact, most taste terrible. Nor are they suitable for sweet (unfermented) cider, although some might add character to a sweet cider blend. However, they all possess qualities that make them very desirable for fermented cider production, and fermented cider is what we mean by 'cider.'

The National Fruit and Cider Institute in Long Ashton, England, evaluated about 2000 cider varieties, classifying them into four categories: **sharp** (low in tannins, high in acid), **sweet** (little or no tannin, low acid), **bittersharp** (high in tannins and high acid), and **bittersweet** (high tannins and sugar, low acid, astringent, said to make the highest quality cider). **Tannin** denotes naturally occurring compounds whose bitter astringency gives cider rounded full flavor, body, and golden color. The Cider Institute also applied the term **vintage** to those varieties that possess the perfect qualities for cider.

Bittersweets don't contain enough acid to make quality single-variety ciders. Cider needs a sharp apple to provide some acid. Cidermakers blend the bittersweets with bittersharps or high-acid dessert apples. Among *the* most highly praised dessert apples with adequate acid levels for blending are Golden Russet, Esopus Spitzenburg, Roxbury Russet, Ashmead's Kernel, Wickson, Golden Delicious and Wealthy. Cider makers also tend to use what they have at hand: many other dessert apples—or even wild seedling fruit—may have plenty of acid to use in blends.

A well-planned cider orchard includes several varieties of each season, ripening in a progression through the fall. (It does no good to have an early bittersweet if none of your other varieties will be ripe until late October.)

Cider enthusiasts are growing many vintage apples that have been imported to the U.S. in recent years. In response to this renaissance, we offer some of the best varieties. Our thanks to Steve Wood of Poverty Lane Orchards and Farnum Hill Cider in Lebanon, NH, for providing us with piles of scionwood and ongoing advice for this project. Some cider apples are in short supply. If you plan to order more than a few trees and would like to discuss availability, call or send us an email. If necessary we can custom-graft larger quantities of any of these varieties.

We recommend two books on cider making: *Cider Hard and Sweet* by Ben Watson and *Cider: Making Using and Enjoying Sweet and Hard Cider* by Annie Proulx and Lew Nichols.

All cider apples are on standard (Antanovka) hardy seedling rootstock. (We provide trees between 3 and 6' tall.)

Cider Apple Collection A package of seven trees to begin your cider orchard. Our choice of two sharps or bittersharps and five bittersweets for each collection. The seven individually labeled trees will include at least six different varieties, perhaps including some not listed here. **ME Grown.**

1270 Cider Apple Collection, bundle of 7, $125.00

Bramtot Fall. Bittersweet. Thought to be a seedling of the old variety Martin Fessar. France, mid 19th c. The Woolhope Naturalists Field Club brought it to England in 1884. Small ugly conic green partially russeted fruit with a dull orange blush. Juicy firm cream-colored quite bitter very astringent flesh has a very high sugar content. Horrible fresh eating but an excellent bittersweet for blending in cider. Not very well known and rarely included in the literature. Steve Wood of Farnham Hill Ciders called it "a lovely little apple with nice juice, interesting, aggressively tannic." Strongly biennial. Z4-6. **ME Grown.**

1277 Bramtot, $22.00

Dabinett Late Fall. Medium bittersweet. Probably a seedling of Chisel Jersey, Middle Lambrook, Somerset, England. Most popular cider variety in Somerset today and the mainstay of Poverty Lane's cider orchard. At the MOFGA cider workshop, Steve Woods told us, "If you're going to plant one bittersweet, plant this one." Medium-sized roundish fruit covered with sooty brownish brick-red stripes and blush. Looks rotten even when perfectly firm and ripe. Dense astringent juicy flesh. Sugar content fair and fermentation moderate. High quality well-balanced low-acid cider with a soft-tasting tannin. Pick last week of October, blend with other late varieties. Crops regularly. Grower-friendly tree with a spreading drooping habit, may require help in developing a strong central leader. Not pollen compatible with Chisel Jersey. Midseason bloomer. Z4-6. **ME Grown.**

1285 Dabinett, $22.00

Foxwhelp Fall. Bittersharp. Most sources say that the famous original 400-year-old Foxwhelp of yore has long disappeared from both sides of the Atlantic. No one seems to know the origin of this "new" Foxwhelp that some refer to as "Fauxwhelp." Some think it might be a renegade rootstock. There is disagreement about its worth in the cider barrel. While some consider it to be a valuable bittersharp, others say it should be relegated to the pie pan. (We tried it and it does make a very passable pie.) The distinctly ribbed large fruit is as big as a good-sized Cortland. Blocky-roundish shape with a chalky-greenish-yellow skin, light pink-red stripes and some blush. Very juicy and tart. Makes for surprisingly decent fresh eating. Blend it in the barrel with the fall bittersweets. Considered moderately vigorous and a good cropper. High specific gravity. Early-season bloomer. Z4-6. **ME Grown.**

1293 Foxwhelp, $22.00

Kingston Black Fall. Bittersharp. Unknown parentage. Somerset, England, early 19th c. High in tannin and high in acidity. Produces full-bodied vintage cider with a nice blend of acid, tannins and sugar. Ferment it alone or in a blend. One of the few varieties which makes a high-quality *single variety* hard cider. We've become fans of Farnum Hill's tasty Kingston Black varietal. Medium-sized conical beautiful rich red fruit, mottled with red russet and deeper shades of maroon (but not black!). Fairly decent fresh eating. The tree is a reliable bearer, but is gangly and needs careful pruning. Blooms midseason. Z4-6. **ME Grown.**

1301 Kingston Black, $22.00

Medaille d'Or (Gold Medal) Late Fall. Full bittersweet. Developed by a Mr. Goddard of Boisguillaume, Rouen, France. Introduced into England in 1884. Medium light yellow roundish fruit mostly covered with patches and netting of smooth tan russet. In the 1993 British text, *The Book of Apples*, Joan Morgan and Alison Richards write that it "produces sweet, heavily astringent juice and full bittersweet cider 'often high in alcohol, fruity and good quality.'" Combine with other late varieties. Z4-6. **ME Grown.**

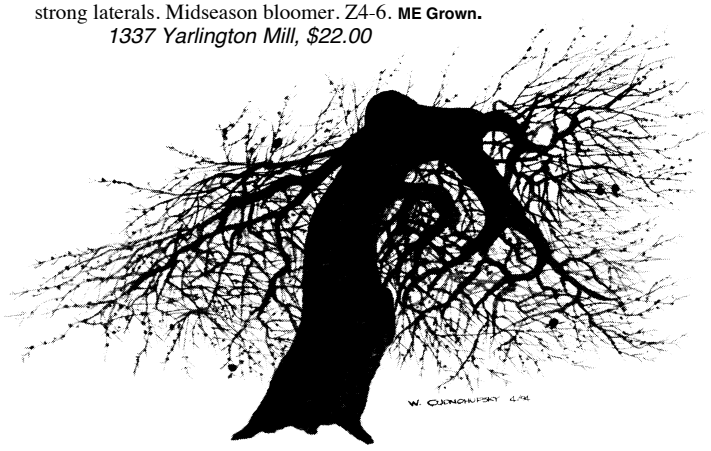
1313 Medaille d'Or, $22.00

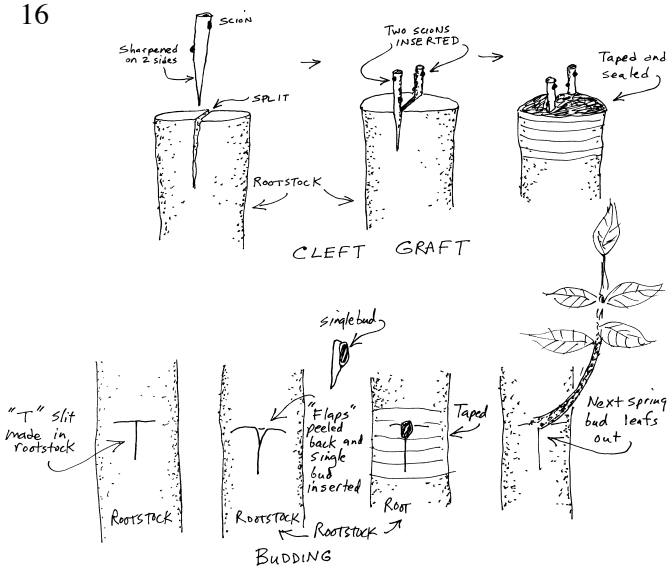
Somerset Redstreak Early Fall. Medium bittersweet. Old variety from the Sutton Montis area, Somerset, England. Frequently planted in newer British cider orchards. Medium-sized conic fruit, striped and blushed shiny red. The sides are somewhat streaked with red though not as much as St. Lawrence. Steve calls this "a lovely apple." Very juicy and astringent. Considered a heavy cropper. Picked mid-late September in central New Hampshire. This tree has an upright growth habit and may require heading back the central leader in early years to develop strong lateral branches. Strongly biennial. Not precocious. Mid-season bloomer. Z4-7. **ME Grown.**

1325 Somerset Red Streak, $22.00

Yarlington Mill Fall. Medium bittersweet. Yarlington, near North Cadbury, Somerset, England, 1898. Once common in farm orchards of central Somerset. Steve's other favorite bittersweet. Medium-sized yellow conical fruit with a pinkish blush and over-spreading darker red stripes. Considered an all-round excellent variety: reliable, productive and adaptable to varying conditions. Rich brown low-acid mild lovely aromatic fruity cider, not aggressively tannic. Above-average sugar content. Slow to medium fermentation. Somewhat gangly tree with a lot of blind (non-productive) wood. You may need to head back the leader in early years to encourage strong laterals. Midseason bloomer. Z4-6. **ME Grown.**

1337 Yarlington Mill, $22.00





Scionwood We offer scionwood from a wide selection of fruit trees including many listed in this catalog. Price is $3.00 per stick (about 8") plus shipping. To order scionwood or rootstock for early shipment, send us a SASE requesting a scionwood order form or download it from the Fedco Trees website. Deadline for ordering scionwood is February 26, 2010. We will ship around March 25.

Hardy Rootstocks We consider these to be some of the best rootstocks for home or commercial use. Any of these produces fruit suitable for wildlife without grafting. For rootstocks not listed, or for larger calipers or larger quantities, please write for information. We also offer grafting supplies in the Organic Growers Supply section of the Seed catalog or online at **www.fedcoseeds.com**.

You may order rootstock to be shipped around March 25. To do so, use the scionwood order form obtained by requesting it with a SASE or downloading it from our website. Rootstock ordered on the regular order form in this catalog will be shipped with the rest of the Tree order in April.

Please join us Saturday, March 27, 2010, at the Maine Tree Crop Alliance annual scionwood exchange and grafting workshop in the exhibition hall of MOFGA's Common Ground in Unity. MOFGA also offers a full range of organic orcharding classes; see the MOFGA website (www.mofga.org) for details.

***Malus* 'Antanovka'** (Apple) Hardy Russian seedling rootstock for standard-sized apple trees. Z3. (1/4" caliper)

1350 Malus Antanovka , bundle of 10, $18.00

***Malus* EMLA 26** (Apple) Produces a tree about half the size of a standard tree, in between the size of M9 and M7. Appears to be hardier than M7, producing better quality fruit. Adaptable to all but poorly drained soils, not as sensitive to mineral deficiencies as some rootstocks. Staking recommended in exposed locations. Z5, maybe 4. (1/4" caliper)

1370 Malus EMLA 26 , bundle of 10, $18.00

Prunus americana (Plum) Seedling rootstock for American, Japanese or hybrid plums. Also recommended for grafting peaches. Seedling plum produces very decent 1" fruit without grafting. The best pollinator for hybrid plums. (See explanation in plum section on page 19.) Z3. (1/4" caliper)

1384 Prunus americana , bundle of 10, $18.00

***Prunus avium* 'Mazzard'** (Cherry) The rootstock we use for grafting sweet and pie cherries. Shallow spreading root system. Longer lived than Maheleb though not as hardy. Does not do well in heavy poorly drained soils. Z4/5. (1/4" caliper)

1387 Prunus avium Mazzard, bundle of 10, $18.00

***Prunus cerasifera* 'Myrobalan'** (Plum) Seedling rootstock for European-type plums. Not recommended for American or hybrid plums. Z4. (1/4" caliper)

1388 Prunus cerisifera Myrobalan, bundle of 10, $18.00

Pyrus communis (Pear) Seedling rootstock for pears. Exceptional resistance to pear decline. Good uniformity. Z4. (1/4" caliper)

1400 Pyrus communis, bundle of 10, $18.00

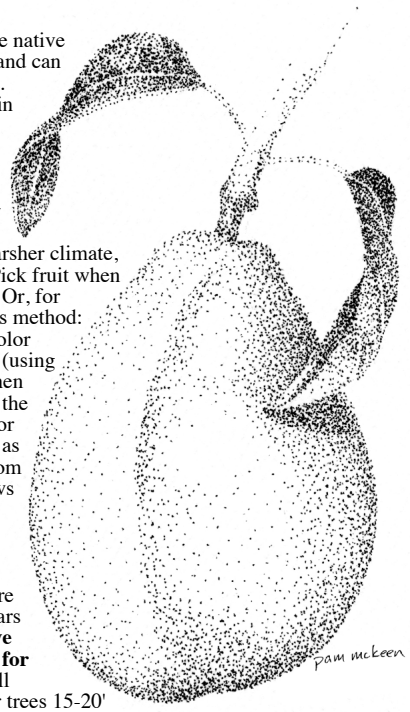
Grafting Wax

These days most grafters use synthetic products in lieu of grafting wax. They tend to be easy to apply and fairly inexpensive. Some, however, want to use the real thing. Eric Johnsen brought some homemade grafting wax to the scion exchange last spring. Here's his recipe:

2 cups beeswax
2 cups pine pitch
1 1/2 cups raw linseed oil

Melt all ingredients in an old pot. Heat and stir with a stick or an old wooden spoon until all ingredients blend thoroughly. Then, pour into aluminum pie tins. Let cool and harden. To use, wet hands before handling wax to prevent sticking. Slice wax with a knife, shape with fingers, and mold onto grafting site.

Pears *Pyrus communis* are native to temperate Europe and Asia and can grow up to 100' tall in the wild. Many pear varieties are hardy in New England, but tend to take longer to come into bearing than apples. Further south, pears tend to bear annually. However in Maine, where they are approaching their northern limit and due perhaps to our harsher climate, pears tend to bear biennially. Pick fruit when green and ripen it on the shelf. Or, for optimal eating, try Ed Fackler's method: "…when fruits exhibit slight color changes, begin to test pressure (using your thumb) near the stem. When there is a slight 'give,' pick all the fruit, store at or near 35° for 7 or more days. Then remove them as needed, allow them to sit at room temps for 2-4 days which allows them to ripen to peak flavor."



Pear blossoms are less attractive to bees than apple blossoms, so pears should be planted closer together to ensure pollination. Although some pears appear to be self-pollinating, **we recommend a second variety for pollination**. Bloom dates for all varieties are similar. Plant pear trees 15-20' apart. (3 1/2-6' trees)

Bartlett Late Summer. (Williams' Bon Chrétien) Seedling found in Aldermaston, England. Introduced to the U.S. in the late 1700s. Most widely planted and well known of all pears, accounting for 75% of the U.S. commercial crop. Adaptable to many climates and soils. Large yellow classic oblong obtuse-pyriform fruit; very good quality. Full reliable annual crops. Large vigorous easy-to-grow long-lived tree bears young. I used to think you couldn't grow Bartlett in central Maine, but I've changed my mind over the past few years. Now I recommend it as a good choice south of Bangor. Susceptible to fire blight, though that won't be up here until global warming catches up with us. Will not pollinate Seckel. Z4/5.

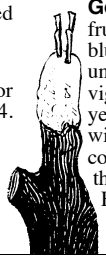
1461 Bartlett, $22.00

Bosc Fall. Seedling in Lourain, Belgium, 1807. Also called **Beurre Bosc**. Oblong acute pyriform, or large and long-necked; dark rich yellow covered with cinnamon-brown russet. Distinctive sweet rich spicy buttery flavor. Melting juicy tender white flesh has smooth texture and a pleasing aroma. Somewhat gritty around the core. Good pollinator. Large vigorous upright spreading tree bears huge crops annually. A longtime favorite throughout central Maine. Z4.

1474 Bosc, $22.00

Columbia Fall. Originated on the Casser farm, Westchester County, NY, about 1835. Not a fine dessert pear, but excellent for canning or sauce. Large yellowish-green-skinned oblong-obovate-pyriform fruit has yellowish-white granular sweet juicy flesh. Similar in appearance to Bartlett. Large vigorous spreading productive tree fruits very heavily every other year. Our scionwood comes from an old tree in the front yard of the Palermo Historical Society. Year-round it's a majestic sight, especially in fruit. Most years people collect all the fruit and put it to good use; Fedco's Seth Yentes told me he travels an hour to fill his truck there. Z4. **ME Grown.**

1492 Columbia, $22.00

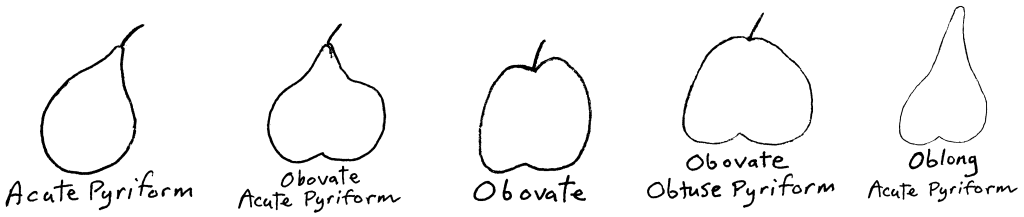


Golden Spice Fall. MN #4 (unknown parentage). U Minn, 1949. Small fruit resembles Seckel in size and shape. Clear yellow skin with light red blush. Light yellow soft tender fine flesh is buttery, juicy, aromatic, tart and unusually spicy. Good eating and canning; not a keeper. Good pollinator, vigorous productive tree. The variety has received mixed reports over the years, suggesting to me that there may be different pears out there tagged with the same name. Ours comes from Bailey Nurseries in St. Paul and I am confident that it is true to type. Extremely hardy. We offer it especially for those in the coldest districts. Should take even the worst of northern New England winters with little or no damage. Z3.

1523 Golden Spice, $22.00

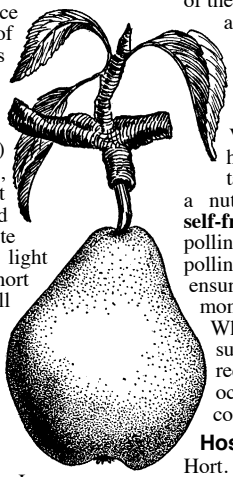
Kaspar's Winter Late Fall-Winter. Frankendorf, Germany. Very good tough-skinned storage pear will keep until April in the root cellar. Coarse flesh with a good flavor. Very hard off the tree; don't eat it until a month after picking. Greenish-mottled medium-small pyriform fruit with some russet splashes or dots. Years ago this nameless winter pear found its way from the roadside near Frankendorf to Unity, ME. The name came later, courtesy of grower Howard Wulf who calls it "the latest-keeping pear I've ever seen." Sturdy adaptable hardy tree. Precocious. *Very short supply; order early*. Z4. **ME Grown.**

1538 Kaspar's Winter, $22.00



Luscious Early Fall. (SD E31 x Ewart) SD State U, 1967. One of the few recent pear introductions that deserves a place in the home orchard. Produces annual crops of delicious medium-sized oblong obovate pyriform fruit. Bears so heavily that it's apt to break branches. The soft fine extra-juicy off-white flesh is sweet and flavorful with almost no grit cells. Thin yellowish skin is covered with small tan dots. Anecdotal evidence suggests that it may crop best when grown near Bartlett or one of the Asian pears. Although some literature warns that Luscious itself is a poor pollinator, I'm happy to have it at our place. Z3. **ME Grown.**

1547 Luscious, $22.00



Magness Late Summer. US 3866-E [Giant Seckel (SP149490) x Doyenne du Comice] USDA, 1960. Rich, melting, buttery, juicy, sugary, tender, highly perfumed and aromatic with almost no grit cells. Renowned plant breeder Elwyn Meader rated Magness as the standard by which to judge other pears in taste and quality. Medium-sized fruit is greenish-yellow with a light dull-bronze russeting, sometimes a crimson blush, and a short pyriform—almost oval—shape. Vigorous spreading tree. Will not pollinate other varieties. Fruit set can be inconsistent. One friend got excellent fruit set by mashing up flowers from other pear varieties and spraying them on his Magness when it was in full bloom. Worked great. Some insect resistance and excellent fire blight resistance. Keeps more than two months with refrigeration. Z4. **ME Grown.**

1552 Magness, $22.00

Patten Late Summer. Orel 15 x Anjou. C.G. Patten introduction, Iowa St U, 1922. The best-quality large hardy pear available. Very good fresh eating with sweet "high flavor." Fine-grained soft flesh has minimal grit cells. Vaguely reminiscent of Bosc in size and shape, although it bulges out where Bosc sucks it in. Good canning pear. Tree is extremely adaptable, growing all over the Northeast. Long willowy branches very flexible, won't break even under the weight of its heavy crops. Scab resistant. A good pollinator for other varieties. Extremely hardy and recommended for coldest districts. Z3.

1582 Patten, $22.00

Seckel Late Summer. Seedling near Philadelphia, PA, early 1800s. Sometimes called **Sugar Pear**. Usually considered the best-flavored of all pears; even the skin is delicious. Small obovate fruit is yellowish-brown russeted with slight red blush. Juicy, spicy, distinctive and aromatic. Eat ripe off the tree or pick firm and ripen later. We use Seckels to make our baked "applesauce." It's wonderful. Very productive annual-bearing large tree, easy to grow. *The* most reliably bearing fruit tree I have. Scab and fireblight resistant. Will not pollinate Bartlett. Z4.

1602 Seckel, $22.00

Stacyville Late Summer. Unknown origin. Stacyville, ME. Medium-sized obovate obtuse-pyriform pears are light yellow with a beautiful orange to greyish-red blush. The sweet fruit has a delicious citrusy aftertaste. My tree began producing only a few years after planting. Now at age 17, it produces large crops of fruit annually. Many years ago friends told me about the pear and insisted that I make the trip to Stacyville in southern Aroostook County. When I finally saw it myself, I thought that the 50' tall vase-shaped tree was an elm. That tree, held together with cables, was extremely old but still bearing huge crops. Appears to be self-pollinating. Disease resistant, extremely hardy and very vigorous. Does not keep for long; use them up quickly! Rare. Z3. **ME Grown.**

1615 Stacyville, $22.00

Summercrisp Midsummer. MN N33201 (Gaspard No. 5), unknown parentage. U Minn, 1986. Brought to the Minnesota Horticultural Research Station by John Gaspard in 1933. Large obovate acute-pyriform very sweet dessert and canning pear with green skin and a red blush ripens in August in Maine. A favorite of Donna and Chyp of Loon Song Farm in Hartland who bought one from us about 20 years ago and have been Summercrisp fans ever since. One reason Donna likes it is it comes on when you're looking for fruit, early in the season. "They're best crisp before they get supermarket soft." In fact, once they do soften, they go by fast. Donna and Chyp eat them fresh, can them in quarters and juice the rest. The juice is so sweet, Donna told me she has to cut it with apple juice when she's canning it or it will get fizzy and explode. Precocious, annually bearing tree, medium-sized with typically conic habit. Long considered the hardiest variety in the Minnesota collection. Free from fireblight. Z3.

1620 Summercrisp, $22.00

ME Grown = grown in Maine by a member of the Fedco growers coop.

Tyson Summer. Jenkintown, PA, about 1794. The definitive 1921 text *The Pears of New York* calls Tyson's flavor "second only to Seckel," and says that the "tree is the most nearly perfect of any pear grown in America." Medium-sized acute-pyriform deep dull-yellow fruit with some russeting and no blush is very juicy, sweet and aromatic. Local lore suggests Jonathan Tyson discovered it in a hedgerow on his farm west of Jenkintown, or maybe on the grounds of the Abington Friends' school. Widely planted here in Maine for generations. Our scionwood comes from a huge spreading specimen in nearby Freedom. Well over 100 years old, the annually productive tree lived through all the great winters of the 20th century. Tolerant of bugs, disease and weather. Fire-blight resistant. Rare. *In short supply; order early*. Z4-6. **ME Grown.**

1638 Tyson, $22.00

Asian Pears

Pyrus pyrifolia have been grown in China, where there are thousands of named cultivars, for over 2000 years. Very long-lived and bearing young, they often produce extremely heavily at maturity. Asian pears differ from European pears in texture, taste and appearance: they are crisp and very juicy, sweet and mild with a nutty background, and are roundish in shape. **Although partly self-fruitful, pollinators are recommended.** The two varieties we offer will pollinate one another. Some European pears, notably Bartlett, will also act as pollinators as long as bloom times overlap. Because they set so heavily, to ensure large fruit size, thin the crop once or even twice during the first two months after bloom. Unlike European pears, they should be tree-ripened. When the seeds are black, the pears are ready to pick. They ripen in late summer and keep several weeks under refrigeration. Cultural requirements are similar to European pears. Although there have been occasional reports of Asian pears growing in Zone 4, they should be considered a Zone 5 plant. ($3\frac{1}{2}$-6' trees)

Hosui Late summer. [Ri-14(Kikusui x Yakumo) x Yakumo] National Hort. Res. Stn. Tsukuba, Japan, 1972. Standard commercial variety. Large round-oblate long-stemmed fruit with medium-thick skin covered with glowing yellow-orange-golden brown russet and numerous light russet dots. Firm crisp fine-textured juicy mild subacid yet sweet rich-flavored white to off-white flesh is considered by some to be the best flavored of all Asian pears. Will store for a month. *Hosui* literally means 'much water.' Medium-sized very vigorous spreading productive tree has a floppy loose almost weeping growth habit. Pollinated by other Asian pears or Bartlett. Susceptible to fire blight. Z5.

1690 Hosui, $22.00

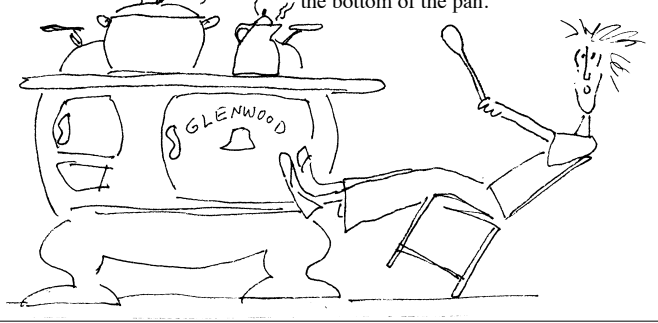
Niitaka Late summer. Amanogawa x Imamuraaki. Japan, 1915. Large roundish orange-brown russeted fruit with sweet crisp juicy flesh. Described by "The Fruit Guys" as having "so much juice that when you eat them you will need a napkin nearby. The Niitaka pear is candy-sweet with aromatic flavors of caramel and butterscotch." Great for fresh eating and canning. Medium to low vigor, very upright, highly productive tree. Flowers are pollen-sterile but will set fruit well when cross-pollinated with most varieties. Ripens after Hosui. Stores two months. Susceptible to fire blight. Z5☐

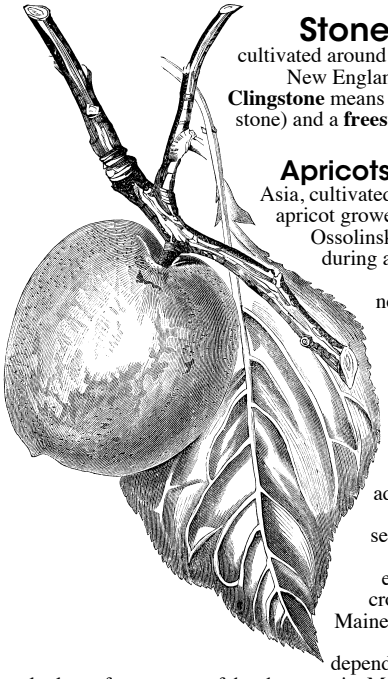
1705 Niitaka, $22.00

Making pear sauce and applesauce in the oven

Tom Vigue learned from an old-timer how to make syrupy fruit sauces and butters by roasting the fruit. We love this recipe. It requires no sugar, spices, cream or ice cream.

Fill a large (or huge) roasting pan with whole pears or apples with only the stems removed, as long as the fruit is of nice quality and doesn't need more trimming. Roast at approximately 350° for a couple of hours, checking occasionally to mash down any fruit before it scorches. After two hours or more, when fruit is soft, process through a food mill to remove skins and cores. At that point you will have a sauce. Return sauce to the oven and roast for a few more hours, depending on how concentrated you want it. A very concentrated sweet fruit butter eventually results without ever burning the bottom of the pan.





Stone Fruits

Prunus spp. are widely cultivated around the world and adaptable to most of New England. Not highly particular as to soils. **Clingstone** means the fruit's flesh clings to the pit (or stone) and a **freestone** pit drops away from the flesh.

Apricots

P. armeniaca are native to central Asia, cultivated there for about 4000 years. Maine apricot grower and good friend Richard "Ozzie" Ossolinski wrote recently, "from what I saw during a recent road trip through the Stans, apricot 'orchards' hardly seem necessary.…Wild trees are as prevalent there as spruces are here in Maine.☐Even in the most rugged mountain terrain (think Osama) apricot trees seem to have established themselves wherever a few teaspoons of soil exist near a trickle of water: really pretty amazing." The trees are only marginally adaptable to northern New England. Because their early blossoms are sensitive to cold spring weather, they are often planted with northern exposures to delay blooming. Large crops are possible, but uncommon, in Maine. The zone rating should be viewed as an approximation because much depends on your site. We are on the lookout for reports of hardy trees in Maine and other northern locations. Please let us know if you've had success.

We will have small quantities of other varieties available at the Tree Sale. Plant 15–20' apart. **Self-pollinating**. (3½-6' trees)

Puget Gold Summer. Originally called Cougar Gold. Chance seedling (possibly of 'Perfection'). Discovered in Anacortes, WA, by Jean Copeland. U of WA introduction, 1987. Roundish-ovate clear yellow red-blushed fruit. Dense firm sweet deep orange-yellow freestone flesh is good to excellent fresh eating, drying or canning. Prolific. The blossoms are more frost-tolerant than those of many apricots; disease resistance is above average. Offered again with the encouragement of Downeast (coastal) Maine grower Ozzie Ossolinski: "Whereas not every PG that I have planted for clients has performed as well as those in my own orchard, I continue to recommend (and plant) it for those who are looking for a low (i.e. no) maintenance tree from which they might actually harvest some decent fruit." Ripens about September 1st at Ozzie's. Moderately vigorous spreading tree will grow to about 15x15'. Warmer Z5.

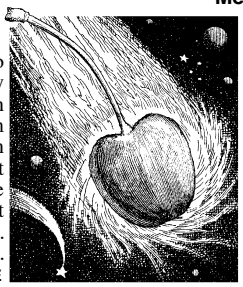
1810 Puget Gold, $22.00

Sweet Cherries

P. avium are generally not hardy in Maine. Most grow into very large trees. We are currently testing some of the hardiest varieties and hope to have more of them available in upcoming years. **Most require a second variety for pollination.** (3½-6' trees)

Gold Summer. Medium-sized translucent golden-yellow firm fleshed crack-resistant fruit of exceptionally good quality, also very productive. Grown commercially in Michigan and New York. Originally selected for maraschino cherry processing, but its hardiness and good taste make it an excellent choice for northern sweet cherry growers. Requires a second variety for pollination. Ripens late. Large tree. Z5/4. **ME Grown.**

1878 Gold Sweet Cherry, $22.00



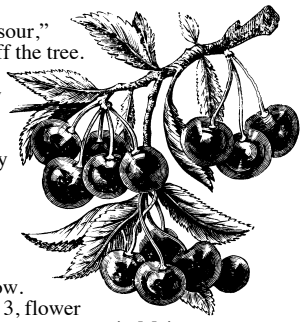
Leningrad Our old friend Mark Fulford, fruit grower, explorer and tester, originally brought this Russian variety to our attention. In our ongoing effort to locate and offer hardy sweet cherries, we have been very impressed with Leningrad. In our Monroe, ME, test plots near Mark's farm last winter, some varieties died to the ground and even Evans got hit hard. Leningrad suffered some winterkill, but pulled through to live another year. At –30˚ we were impressed. Very good quality dark red fruit. Upright vigorous tree. Requires a second variety for pollination. Bloom time compatible with Gold but ripens later than Gold. Maybe worth a try in Zone 4 and certainly in Zone 5. **ME Grown.**

1894 Leningrad Sweet Cherry, $22.00

Stella Mid-summer. 2C-27-19 (Lambert x John Innes Sdlg. 2420) Canadian Dept of Ag Research Stn, Summerland, BC, 1968. The first hardy good-quality self-fertile sweet cherry. Large heart-shaped black-skinned fruit has juicy medium-firm black flesh. May be a disappointment to sweet cherry aficionados from the Northwest but could be like a dream come true for orchardists living in the warmer locales of Maine. Fruit buds are relatively tender. Upright spreading vigorous productive tree will grow to 25–30'. Self-pollinating, also pollinates other sweet cherries. Z4.

1910 Stella Sweet Cherry, $22.00

Pie Cherries



P. cerasus are called "sour," but they're delicious enough to eat right off the tree. They fruit in early to midsummer and don't mind heavy soil. They are especially good in pies. They are generally divided into two groups: Morello types have dark red spherical fruit, dark juice and relatively small compact trees. Montmorency (or Amarelle) types have light red slightly flattened fruit, clear juice and medium-sized somewhat open trees. Pie cherries are significantly hardier than sweet cherries but can be frustrating to grow. Although the trees are fully hardy in Zone 3, flower buds may be damaged in colder winters. Some growers in Maine have reported large harvests only to have their trees die unexpectedly a year or two later. We regularly hear reports of excellent crops so we know it can be done. We are currently testing several promising varieties including some local heirloom discoveries. Our hope is to find pie cherries that will be consistently healthy and productive. We are very interested in your successes and failures. If you have had experiences you think might be useful to others, please be in touch. **Pie cherries are self-pollinating, do not require another variety for pollination**. Plant 15-20' apart. (3½-6' trees)

Evans Mid-Late Summer. Unknown parentage. Edmonton, Alberta, Canada. Also called Bali. Rescued from obscurity in 1976 by Dr. Ieuan Evans for whom it was named. Thought to have been brought to Alberta by early settlers from Minnesota. Known in the Edmonton area at least back to 1923 but only recently gaining widespread attention. Hardiness reports are inconsistent, but our own Aroostook County trials are proving it to be hardier than Meteor, Montmorency and North Star. Cropping and fruit-quality reports are also inconsistent. Some extremely positive and others not so. There is also debate about the differences between grafted trees and "own root" specimens usually started by tissue culture. We are now doing side-by-side trials in four Maine locations to see if we can sort that all out. Large crops of English Morello-type fruit are possible and the fruit is considered to be excellent for eating, jams, jellies, pies, dark red juice and wine. Naturally dwarf tree, tolerant of a wide range of soils, although prefers light fertile soils. This year we are offering grafted trees. Z3. **ME Grown.**

1927 Evans, $22.00

Garfield Plantation Unknown origin. Garfield Plantation, ME. Heirloom pie cherry grown for generations on an Aroostook County farm. One of our most promising finds in our search for varieties that really do produce. This year trees in northern Maine flowered and fruited after –44˚. Friends introduced it to me a couple of years ago. Although the original tree is long gone, it lives on in the form of innumerable young trees that have suckered up for 100 feet or more behind the farm along the edge of the ubiquitous potato field. You could keep it to a single tree yourself by snipping off any suckers. Hardy, disease resistant, productive and extremely long-lived. Z3. **ME Grown.**

1932 Garfield Plantation, $22.00

Mesabi Summer. Bing x chance seedling. (Sweet x sour cherry) Duluth, MN, 1964. Red skin and lighter red flesh with clear juice. Considered to be a sour cherry, but sweeter flesh than other pie cherries. Recommended for sauce and pies. Heavy yielding and extremely hardy. Will grow to about 10–14'. We recently consulted one central Maine grower who has been fruiting Mesabi for nearly 20 years. Thus far, the tree has remaining healthy and bearing. This is encouraging news; we are cautiously optimistic. Now on trial in our orchard. Z3/4.

1933 Mesabi, $22.00

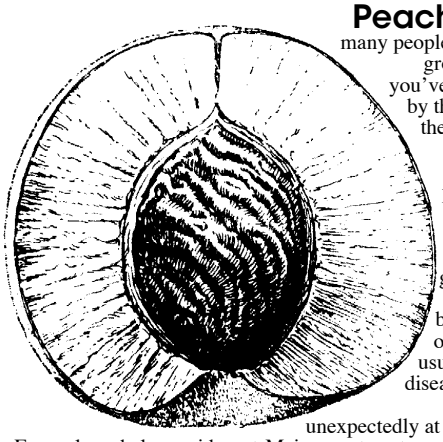
Meteor Summer. MN 66 (Montmorency x Vladimir) U Minn, 1952. Bright scarlet-red roundish-oval fruit. Clear bright yellow flesh and clear juice. Mildly acid flavor. Has proved to be a consistent producer in some locations but very susceptible to brown rot in others. In coldest districts, cropping has been inconsistent and hardiness questionable. In our Aroostook County test orchard, trees died to the ground this winter after temperatures of –38˚: not as hardy as Evans or Garfield Plantation. However, we still recommend it from central Maine south, Zones 4, 5 and 6, where some growers are having great success with Meteor. Very good eating right off the tree. Also good for pies, canning and freezing. Easy to pit. Excellent dried. Ripens mid-July in Central Maine. Reaches 12–16'. Z4.

1935 Meteor, $22.00

Montmorency Summer. Seedling of Cerise Hative or Cerise Commune. Montmorency Valley, France, before 1600. Introduced to the U.S. about 1830. The most famous of all pie cherries. Not widely grown in Europe or Russia but long the standard of excellence in the U.S. Firm-fleshed bright red fruit makes a clear light pink juice. Surprisingly hardy, though not as hardy as Garfield Plantation and Evans. Our Aroostook County test orchard trees fared better than Meteor last winter, but just barely. Should do really well from central Maine south. Appears to be resistant to brown rot. Vigorous productive medium-sized upright-spreading tree tolerates a variety of soils. Parent of Meteor. Z4.

1940 Montmorency, $22.00

Peaches *P. persica*



Although many people will tell you not to bother growing peaches in Maine, if you've been repeatedly saddened by the poor quality available in the supermarket, what's there to lose? Many trees in northern New England produce large crops. While these are certainly not like what you'd get in Georgia, they still taste awfully good. They bear young and so heavily that they may break branches if unthinned or unsupported. Peaches are usually unaffected by pests or diseases in northern areas. That said, trees may also die unexpectedly at any time—like last winter. Even along balmy midcoast Maine, mature trees got nailed. It was a tough winter for peaches, reminding us that there are no truly hardy varieties. Even the good old original Lars Anderson tree finally passed on.

Some growers are miffed that they get no fruit after dutifully **pruning** their trees. Peaches fruit on last year's growth! If you prune it off, you'll get no fruit. Prune your peach trees in April or even May up north, once they begin to leaf out. Trim off any dead branches and leave most or all of the live wood. If your tree becomes leggy, make a few bold cuts each year back to a vigorous branch closer to the trunk. That will promote even fruiting throughout your tree.

Peach trees do not need a second variety for pollination. Plant 15-20' apart. (3½-6' trees)

Belle of Georgia Summer. Seedling of Chinese Cling. Marshallville, GA, about 1870. Old-time favorite and surprisingly hardy in spite of its origin. Large beautiful roundish-oval cream-colored fruit with a bright red blush and thin tender skin. Flesh is white, tinged with red, firm, melting, juicy, very high quality. Freestone. Very good fresh eating, cooking and canning. Large vigorous productive tree. Resistant to bacterial spot, slight resistance to brown spot. Hardier than we originally thought; we now know of trees fruiting well almost as far north as Bangor. Z4/5.

1963 Belle of Georgia, $22.00

Garnet Beauty Summer. Sport of Red Haven. Ruthven, Ontario, 1958. A mutation (sport) of Red Haven discovered by Garnet Bruner in 1951 and introduced seven years later. Medium to large yellow-fleshed semi-clingstone fruit with excellent flavor. Ripens 12 days earlier than Red Haven with similar hardiness. Vigorous and productive tree. Good bud hardiness. Recommended for colder disticts. Z5.

1978 Garnet Beauty, $22.00

Madison Summer. Ideal x Red Haven. VA Station, 1963. A fine peach for the North, with hardiness similar to Red Haven. Medium-large fruit with bright orange skin and bright red blush. Orange-yellow firm fine-textured juicy flesh with excellent very sweet rich peach flavor. Very good quality. Skin peels easily. Freestone, excellent canner. Very productive tree. Exceptional tolerance to blossom-season frost. Z5.

1990 Madison, $22.00

PF 24C Peach Unrecorded parentage. Selected by Paul Friday at his breeding orchard in Coloma, MI, 2004. The latest in hardy peach introductions, creating a lot of hoopla in hardy-fruit circles. Part of the well-known "Flamin' Fury" line of peaches. 'C' stands for Cold Hardy. Freestone yellow and red peach with firm non-melting flesh and excellent rich flavor. Larger fruit than Reliance or Madison. Good bud hardiness. PF 24C has performed extremely well during recent test winters in Michigan trials. While it is untested in Maine, we think it is worth a try in Zone 5 and maybe even Zone 4. Late blooming and late maturing. Bacterial spot resistant. Z5/4.

1998 PF 24C Peach, $22.00

Red Haven Summer. Halehaven x Kalhaven. MI Ag Exp Stn, 1940. Considered hardy, but not as hardy as Reliance. Medium-sized round fruit with beautiful red and golden-yellow skin and sweet firm fine-textured yellow flesh. Non-browning. Excellent for eating, freezing, canning, shipping. Probably the best-flavored peach we offer; also the world's most widely planted freestone peach. Hardy buds; vigorous highly productive disease-resistant spreading trees are tolerant to bacterial spot. Z5.

2005 Red Haven, $22.00

Reliance Summer. Open-pollinated seedling of Minn PHO 4559 x Meredith. NH Ag Exp Station, 1964. Considered the hardiest peach. Medium-sized, roundish, freestone. Rather dull red blush over greenish yellow. Bright yellow flesh, soft and juicy. Flavor usually considered fair, but those who grow it in Maine love it. Often produces large crops. Bears at an early age. Appears to be resistant to peach leaf curl in our trials. Z4/5. **ME Grown.**

2010 Reliance, $22.00

Hybrid Plums *Prunus* spp.

are extremely hardy crosses between various Asian and American species.

Hybrid plum pollination has been glossed over—or avoided—in virtually all catalogs and fruit-growing literature for generations. Some years on our farm we were getting decent crops, but most years, not. We tried a number of different strategies as Fedco catalog readers will know. However Rick Sawazky at the University of Saskatchewan unearthed a 1934 article that quoted Prof. W. H. Alderman of the University of Minnesota: "…very few hybrid plums would accept pollen freely from other hybrids, but they all accept pollen from native plums." Perhaps the breakthrough we've all been searching for!

Our own suspicions, as well as our experiments, appear to corroborate this view. Here's what we recommend: plant a cluster of trees close enough together (3–6') for the branches to "co-mingle." Our "clusters" number from three up to nearly a dozen trees. Include native plum pollinators among the hybrids. With some decent sunshine during bloom, you should get good fruit set. Of course, plums are still susceptible to the small pesky insect, plum curculio. But PC is not difficult to control organically with Surround (see the Organic Growers section of the Seed catalog). And, with decent pollinators nearby, Surround may not even be necessary. In 2008 we decided to skip Surround on one grouping of 8 trees and still got a good crop. Usually Toka, South Dakota and Kaga are recommended as the best pollinators among the hybrids. We also highly recommend planting pure *Prunus americana* (#**2028** or #**1384**) or *P. nigra* seedlings or grafted trees in the orchard.

There has recently been speculation that pollination improves with heat. Growers in warmer districts often report better success with pollination and the thought is that colder temperatures may retard pollen production or even somehow render it ineffective. This could in part explain the fantastic plum crop up here in 2008. Not only was it sunny all during bloom, it was also warm.

Bloom times similar for all varieties. Not susceptible to black knot. (3½-6' trees unless otherwise noted)

Hybrid Plum Collection A package of seven trees to begin your plum orchard. Our choice of 7 different trees, including at least two pollinators. **Plant trees in one cluster**, with about 3–6' between trees. Let the branches grow right into one another (see above) while still keeping them pruned to allow in plenty of air and light. Trees are individually labeled. **ME Grown.**

2026 Hybrid Plum Collection, bundle of 7, $125.00

American Plum Seedling *P. americana* 15-20' Seedling plum that grows in thickets and produces very decent red, yellow and orange 1" fruit, suitable for fresh eating, canning and freezing. Spectacular white bloom in spring. Red fall color. Plant singly as a graceful specimen or plant 3–6' apart and let the branches intertwine for maximum pollination. Tends to sucker freely. May be the best pollinator for hybrid plums. (See above.) Plant one of these for every 3 or 4 plum trees, within 10' of each of them. Extremely hardy. Thanks to all of you who have contacted us with information about pure stands of *P. americana*. Our next mission is to locate pure stands of *P. nigra*. Be in touch! Z3. (3-4' seedlings)

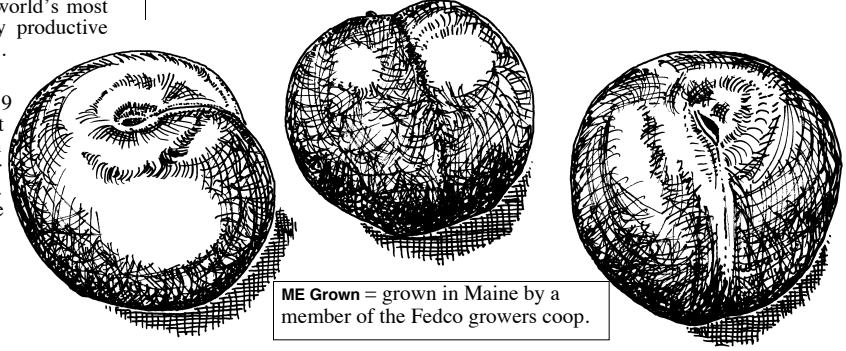
2028 American Plum Seedling, $22.00

Alderman Late summer. MN 416 [*P. salicina* Burbank x Older (P. s. x *P. a.)*] U Minn, 1985. Named for University of Minnesota professor WH Alderman in honor of his 100th birthday in 1985. It was Alderman who made the original cross 40 years earlier. The brilliant red heart-shaped fruit is notably larger than most other hybrids. Golden-yellow sweet juicy clingstone flesh. Excellent quality. Zone 4/3.

2034 Alderman, $22.00

Cocheco Summer. Purple Heart x unnamed red-leaf plum. Elwin Meader introduction. Rochester, NH, c 1968. In a lengthy *Maine Sunday Telegram* article on September 8, 1968, Meader said, "It's an example of being able to have your cake and eat it. The new tree is beautiful enough to be an ornamental. It also has delicious fruit and windbreak value." As we sat together chatting in the gazebo last summer, a friend suddenly turned to me and said, "What is that tree?" Even at 100 feet away, it is a strikingly beautiful sight. Red twigs and buds in winter. A blizzard of nickel-sized light pink flowers in spring. Glossy red foliage all summer long. 1¼" red-orange fruit filled with soft sweet pinkish translucent jelly-like flesh. One of the first to ripen in midsummer. Relatively large tree with an upright growth habit. Z4. **ME Grown.**

2041 Cocheco, $22.00



ME Grown = grown in Maine by a member of the Fedco growers coop.

Gracious Late Summer. Mandan 41-15 [open-pollinated seedling of Emerald (*P. salicina* Burbank x *P. a.* Brittlewood) probably x Red Wing (*P. sal.* Burbank x *P. a. mollis* Wolf)] Northern Great Plains Field Station, Mandan, ND, 1957. Oval-to-roundish yellow-orange fruit with coral-red mottling. Yellow-orange firm juicy sweet flesh. We received our scionwood many years ago from the late Bob Kurle, one of the early members of North American Fruit Explorers (NAFEX). Bob passed along his huge collection of plums, including this one, to me. The literature all says freestone. Ours is not. Over the years I have attempted to locate a specimen of the variety from another original source but with no success. Probably when hybrid plums fell out of favor decades ago, a great deal of genetic material was scrambled or even lost completely. The only other freestone hybrid I know is La Crescent. Gracious could be another exception or perhaps not. South Dakota is freestone, but it is undoubtedly pure *P. americana*. If you know of any other freestone hybrid, please be in touch. It may be a true Gracious. In any event, our "Gracious" is very good. Upright spreading tree. Z3/4. **ME Grown.**

2051 Gracious, $22.00

Kaga Mid-Late Summer. *P. a.* seedling x *P. simonii* (Chinese apricot plum). NE Hansen introduction. SD Stn, 1909. Small 1" purple-black fruit. Good eating out of hand when they're dead ripe. Exceptional in jams and jellies due to the meatiness of the black flesh. This is not one of those plums that dissolves and dribbles down your cheek. The most profuse bloomer in Mark Fulford's plum collection, coming right in the middle of plum season. Mark considers it to be an excellent pollinator for other hybrid plums. It's also been bearing reliably in his Monroe, ME, orchard. I have now planted it and will test it in Palermo. Dense naturally dwarf tree grows only to about 10'. *Kaga* is the Sioux word for 'pitch a tent.' Z3. **ME Grown.**

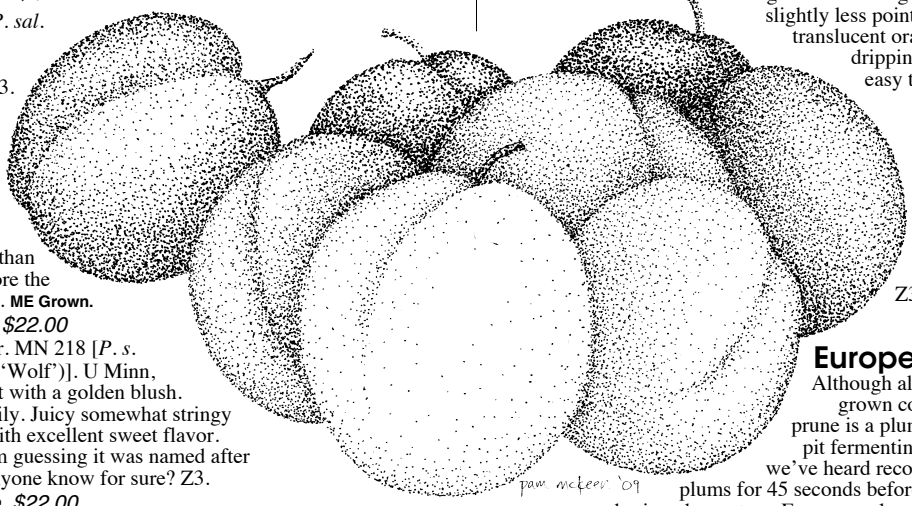
2057 Kaga, $22.00

La Crescent Late Summer. Shiro x *P. a.* Howard Yellow. U Minn, 1923. Also known as **Golden La Crescent** or **Golden Minnesota**. Most of the hybrid plum varieties are colored with some variation of red and orange with a little purple tossed in. Yellow-skinned La Crescent is one notable exception. The beautiful roundish tender thin-skinned yellow fruit is sometimes blushed with a little pink. Tender yellow juicy flesh of excellent quality is sweet, aromatic and suggestive of apricots. Freestone. Upright spreading vigorous tree. Z3. **ME Grown.**

2064 La Crescent, $22.00

Pembina Midsummer. *P. sal.* Red June x *P. nigra* Assiniboine. Intro by NE Hansen, SD Exp Stn, 1923. Large pointy bright red fruit with bluish bloom. Dark golden-orange flesh is firm and apricot flavored. One of the first of the hybrids to ripen every summer, about the same time or a bit earlier than Underwood and well before the bulk of the plum crop. Z3. **ME Grown.**

2075 Pembina, $22.00



Pipestone Late Summer. MN 218 [*P. s.* 'Burbank' x (*P. s.* x *P. a.* 'Wolf')]. U Minn, 1942. Large deep red fruit with a golden blush. Tough thin skin peels easily. Juicy somewhat stringy yellow clingstone flesh with excellent sweet flavor. Vigorous reliable tree. I'm guessing it was named after Pipestone, Minnesota. Anyone know for sure? Z3.

2078 Pipestone, $22.00

Purple Heart Late Summer. Unknown parentage, from Enfield, NH. Brought to the great plant breeder Professor Elwyn Meader by a man who passed away before Meader could ascertain its origin. Usually becomes the instant favorite of anyone who eats it. Medium-sized fruit with red-purple skin and flesh, and a delicate but full sweet flavor. The most delicious plum we grow. Uncertain pollination requirements. Longtime grower Joe Vashon up near Bangor recently told me that he thought Underwood was pollinating his trees. If you have Purple Heart pollination experiences to share, please let us know. Not as hardy as other hybrids. Shows tip or even branch damage following colder winters in central Maine. Has shown susceptibility to black knot in our orchard. Relatively small tree. Z4-6. **ME Grown.**

2085 Purple Heart, $22.00

South Dakota Late Summer. SD 27. *P. a.*, unknown parentage, U Minn/SD Ag Exp Stn, 1949. Because of its very long flowering period and American parentage, we recommend South Dakota as a pollinator for hybrid plums. In my orchard it's still blooming when the other plums have dropped their flowers, also ripens after the other hybrids are done. Small to medium-sized fruit has tough yellow skin with bright red blush. Medium-firm yellow flesh is meaty, juicy, sweet. Freestone. NE Hansen developed it sometime before 1907, and one of his students took it to the breeding program in Minnesota where it was later introduced. Vigorous tree. Z3. **ME Grown.**

2096 South Dakota, $22.00

Superior Late Summer. MN 194 [*P. sal.* Burbank x Kaga (*P. a.* x *P. sim.*)] U Minn, 1933. Very large conical dark red plum with a heavy bloom and 'superior' dessert quality. Firm sweet yellow flesh is smooth textured, extremely juicy and clingstone. Very good fresh eating. During the terribly cold wet summer of 2004 when a number of my younger plum trees were hammered with brown rot, my Superior came through unharmed. I was impressed. Precocious production, vigorous tree. Will show some dieback in coldest locations. Z3/4. **ME Grown.**

2100 Superior, $22.00

Toka Late Summer. *P. a.* x *P. sim.* Intro by NE Hansen, SD Exp Stn, 1911. Rosy red fruit, up to 1½" in diameter, mottled with darker purply red and covered with a faint bloom. Grower Don Johnson's comment was, "Talk about flavor: candy plum." Ed Fackler called Toka the best-flavored plum he grew in his Indiana orchard. Sweet, distinctive, meaty and flavorful. Not real juicy. Extremely vigorous tree blooms heavily every year. Diligent pruning may be required to keep it from becoming a bit of a monster. Considered to be a good pollinator for other hybrid plums. Z3.

2108 Toka, $22.00

Ussurian Late Summer. (*P. sal.* var 'Mandshurica') Hardy plum from eastern Siberia and China. In *Cornucopia II*, Stephen Facciola writes, "The fruits are sweet and juicy and can be eaten fresh. They also make excellent jams, preserves, and plum sauce." In the classic *Origin and Geography of Cultivated Plants* Nikolai Vavilov wrote, "Ussurian plum trees fill some gardens in the area of Amur. This is a very valuable source of material for hybridization with European and other east Asiatic species and can, no doubt, be a source of future fruiting in the north, not only in Siberia but in the European parts of the Soviet Union as well." The future is now! These are seedling trees, so fruit will be variable. Should be hardy in most of Maine. Buy two or more for pollination, but should also cross with native plums including *P. americana* and *P. nigra*. Probably Z3. **ME Grown.** (30-60")

2114 Ussurian, $22.00

Waneta Midsummer. *P. sal.* Apple x *P. a.* Terry. NE Hansen intro, SD Exp Stn, 1913. Released one year after Kahinta, and with the same parentage, when hybrid plums were an important and commercially viable crop. Named after a Yanktonai youth who won fame in the War of 1812 and later became a great chief. Large 1½–2" reddish-maroon fruit, slightly less pointed than Kahinta. Sweet tender translucent orange flesh is very juicy but not dripping. Medium-thick skin, tart and easy to peel. Delicious overall taste. Hansen said of Waneta: "My belief is that in this variety I have combined the best points of the native and the Japanese plum. It is probably the largest [fruit] of over 10,000 seedlings." Early blooming healthy open spreading tree bears reliably in our orchard. Z3. **ME Grown.**

2117 Waneta, $22.00

European plums *P. domestica*

Although also delicious fresh, this plum is grown commercially for prunes. A true prune is a plum that can be dried without the pit fermenting. Although we've not tried it, we've heard recommendations that you boil the plums for 45 seconds before drying them. They should be dry in a day or two. European plums produce smaller fruit and are generally not as hardy as the hybrid plums, though they can handle heavier soils and are less prone to brown rot. Unlike hybrids, they are prone to the fungal disease black knot, which looks like black chewing gum and appears on branches. While not necessarily fatal, it must be kept in check by removing and destroying infected branches. Trees grow upright and are usually trained to a central leader. Although **European plums are self-pollinating**, planting two different varieties will improve pollination. (3½-6' trees)

Mount Royal Late Summer. Chance seedling, Outremont, Quebec, before 1903. Popular plum in Québec and the northern U.S. for many years. Also called **Mont-Royal**. Discovered by Mr. Corse in or near Montreal sometime during the period between 1830-1850. Bears abundant annual crops of medium-sized roundish dark-purple fruit. Often considered the sweetest of the European plums. The flesh is greenish-yellow, juicy and firm. Use fresh, dried, frozen, canned and in preserves. Medium-sized tree is open with good crotch angles and requires only moderate pruning. Z3.

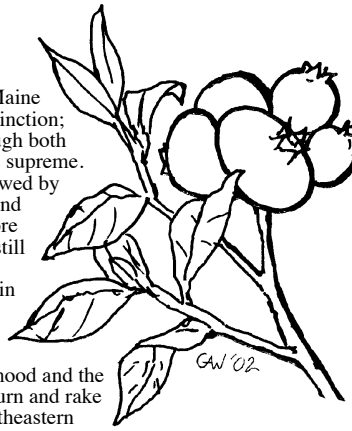
2149 Mount Royal, $22.00

Stanley Late Summer. *P. d.* Agen x *P. d.* Grand Duke. NY Station, 1926. Most popular European prune plum in America with the possible exception of 'Italian'. Excellent for cooking, eating, canning and drying. Medium-to-large fruits with dark blue skin. Green-yellow firm but tender juicy fine-grained sweet flesh. Reliably bearing fast-growing adaptable medium-to-large funnel-shaped tree produces healthy vigorous annual crops. Z3.

2180 Stanley, $22.00

Small Fruits & Berries

Lowbush Blueberry *Vaccinium angustifolium* 6x24"



Blueberry growers in Maine usually don't bother with the "lowbush" distinction; to them, this is the only true blueberry. Though both plants and berries are diminutive, the taste is supreme. Lustrous blue-green foliage in summer followed by an amazing combination of bronze, orange and scarlet in the fall. Grown in Maine long before Europeans came Downeast, blueberries are still a local favorite, cultivated on thousands of acres. Commercial blueberry land is burned in the spring to clear out the weeds; a crop follows a year later. To speed harvesting, berries are usually raked rather than hand-picked. I do either, depending on my mood and the availability of my rake. You don't have to burn and rake to have a small-scale planting. Native to northeastern U.S. Z2. (2-yr transplants)

2260 Lowbush Blueberry, $10.00

Lowbush Blueberries

Woodsy dry poor acid soil (pH 4.0-5.2) is a prerequisite for lowbush blueberries. If you've got white pine, you're probably all set. Plant 12" apart each way and cultivate as a ground cover. Generally self-pollinating; other blueberries nearby will help ensure pollination. Full sun is best for maximum fruit production. Keep your patch weed free.

Highbush Blueberries *V. corymbosum*

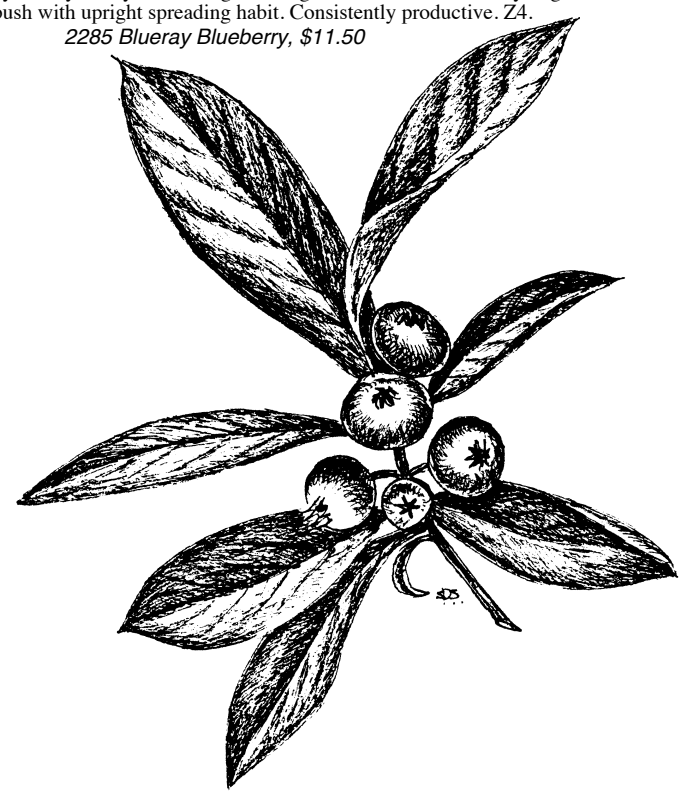
are native to North America. While usually associated with New Jersey and Michigan, many of Maine's lakes are lined with massive stands of highbush blueberries. Grazing the shore requires only time and a suitable vessel; I prefer kayak or canoe. The beautiful vigorous shrubs are extremely easy to grow at home, productive and reliable, with few disease or insect problems. By planting several varieties, you can harvest berries from early July through most of August. **Two varieties are required, three or more recommended, for pollination**. (12-30" 2-yr-old plants)

Bluecrop Early-Midseason. GM 37 (Jersey x Pioneer) x CU-5 (Stanley x June) USDA, NJ, 1952. Medium-sized firm subacid fruit; very light blue berries of high dessert quality, resistant to cracking. Medium-large open clusters. Vigorous, upright 4-6' consistently productive bush. Ripens over a long season. May not be perfectly ripe when they first turn blue. Give them a few more days to reach full flavor before picking. Pruning will help maintain fruit size. Z4.

2280 Bluecrop Blueberry, $11.50

Blueray Mid. (GM 37 x CU-5) USDA, NJ, 1955. Large firm dark blue berries of high dessert quality in small clusters. Considered the best-tasting by nearly everyone who grows highbush blueberries. Very vigorous 4-6' bush with upright spreading habit. Consistently productive. Z4.

2285 Blueray Blueberry, $11.50



Duke Early. G-100 (Ivanhoe x Earliblue) x 192-8 (E-30 x E-11), USDA, NJ, 1987. Recent release considered a big improvement over Earliblue, the standard early cultivar. Firm medium-sized light blue fruit with mild sweet flavor, excellent for fresh eating or processing. Vigorous upright high-yielding 4–6' bush. Long stems and loose clusters. Z4.

2295 Duke Blueberry, $11.50

Earliblue Extra Early. Stanley x Weymouth, USDA, NJ, 1962. The first blueberry of the season to ripen. Moderately large medium-blue firm aromatic fruit with good dessert quality. Vigorous upright hardy moderately productive bush, with medium-sized loose clusters of berries that do not drop easily. Resists cracking. Some resistance to powdery mildew. Z4. **ME Grown.**

2300 Earliblue Blueberry, $11.50

Elliott Very Late. Burlington x [Dixi x (Jersey x Pioneer)] USDA, 1974. A real season-extender. Considered the latest of all varieties, Elliott ripens two weeks after Jersey. Loose clusters of medium-sized very firm mild-flavored light-blue berries. Slightly spreading somewhat bushy upright plant is consistently highly productive in part because it blooms late and escapes spring frosts. Be forwarned: the berries may turn blue before they reach their peak flavor. Leave them on the bush until they are fully ripe. Check a few before you pick them all! Z4. **ME Grown.**

2304 Elliot Blueberry, $11.50

Jersey Mid-Late. Rubel x Grover, USDA, 1928. The beloved old standard of blueberry introductions to which new varieties are compared. Medium-to-large dark blue berries in large loose clusters. Vigorous erect hardy bush, 5-7' tall. Productive, widely grown, adapted to a wide range of soils, highly praised, easy to grow and suited to the New England climate. Z4. **ME Grown.**

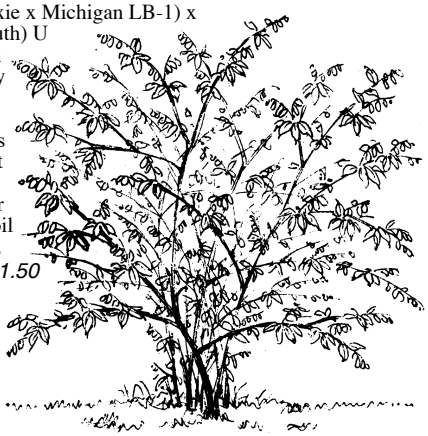
2310 Jersey Blueberry, $11.50

Northland Early. Berkeley x 19-H, Mich St U, 1967. Early highbush x lowbush type bears long loose clusters of medium-small dark blue berries with excellent wild flavor. Very vigorous and productive, 3' moderately spreading bush has limber branches which tolerate snow well. Good for landscaping, bird forage and dessert. Hardy. Z3. **ME Grown.**

2325 Northland Blueberry, $11.50

Patriot Early-Mid. US3 (Dixie x Michigan LB-1) x Earliblue (Stanley x Weymouth) U Maine, 1976. Partial lowbush parentage. Adaptable to many soil types. Productive berry will fill your super bowl *every* year! Large firm berries with good color and excellent flavor. Upright open spreading 4' bush. Tolerant or resistant to some strains of soil fungus. Hardy. Z3. **ME Grown.**

2335 Patriot Blueberry, $11.50



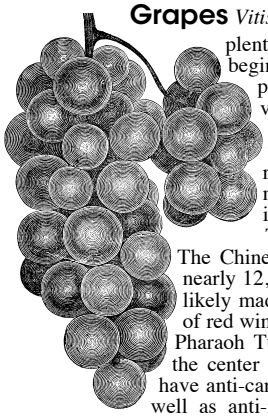
Highbush Blueberries are shallow-rooted and like light acid soil (pH 4.0–5.2) with plenty of organic matter, good drainage, and plenty of water. Space them 3–6' apart (3' for the shorter varieties) in rows 8–10' apart. If your soil is lacking acidity, add peat, woods humus, or 1 cup elemental sulfur per bush.

Dig a hole at least twice the size of the root ball. If you use peat, soak it and then mix it with soil at a one-to-one ratio. We suggest soaking roots in Agri-gel. Plant at the same depth as in the nursery (or slightly deeper). Do not let the roots dry out! Pack the soil firmly and water thoroughly. Plants require at least 1" water per week during the growing season. On most soils, blueberries require regular applications of nitrogen. In the spring, fertilize with 21-0-0 fertilizer at a rate of 1–2 tablespoons per year-of-age plant (e.g., 3–6 Tb for a 3-year-old plant). Or use an organic equivalent such as 1/2–1 qt composted hen manure per plant.

Fruit is produced on vigorous one-year shoots off healthy canes. As canes age they become twiggy and less productive. Begin pruning after three years. Head back long pieces of new growth for a bushier plant. Cut out weak or dead canes and dead tips. Each bush should be allowed to grow 6–10 canes varying in age from one to six years old. Thereafter, remove dead canes and those over 6 years old and encourage new replacement canes. Bushes with regular moderate pruning produce the most berries.

Berries may need net protection from birds. One of the best arrangements I've seen is John Meader's netted "house" in Buckfield. He has about 40 bushes growing under a framework made of posts and 2x4s and completely covered in netting.

Competition with grass may weaken and kill your blueberries. Mulch heavily (3–6" or more) every year with pine needles, cardboard, wood chips, hay, sawdust, even old slab wood. When using sawdust you may want to compensate by adding extra nitrogen.



Grapes *Vitis* spp. Grapes are easy to grow and can bear plentifully even in northern New England. They begin fruiting in the second or third year after planting. They are rugged and cold-hardy. Our vines bear consistently every year. Although many people prefer seedless types for table use, seeded varieties can be quite enjoyable right off the vine if you don't mind "grape nuts." Grape seeds contain an anti-oxidant that is twice as powerful as Vitamin C.

The popularity of drinking wine is not new. The Chinese were fermenting it from hawthorn berries nearly 12,000 years ago. The first wine from grapes was likely made in Turkey or Iran about 5,000 BCE. Traces of red wine were even found in the tomb of the Egyptian Pharaoh Tutankhamen. Resveratrol is the polyphenol at the center of the current red wine hoopla. It appears to have anti-carcinogenic and anti-inflammatory properties as well as anti-microbial agents that work to prevent heart disease. Red wine and grape juice are good for you!

Most grape varieties are bred from a combination of different species, *V. labrusca* and *V. vinifera* being the most important. *Labrusca* is native to the eastern U.S., has a wild tart musky (foxy) flavor, and is hardy and disease-resistant. Concord is the best-known of the labruscas. *Vinifera*, native to Europe, is extremely high quality, making it the most important wine grape in the world, but is not cold hardy and is prone to disease. Riesling and chardonnay are the two hardiest pure *vinifera* grapes.

In central Maine, "very early" grapes begin ripening in mid-August, while "midseason" ripen mid-September. Late-season Concord, a standard elsewhere, does not ripen in many northern areas. **Most do not require a second cultivar for pollination.** (1-2 yr well-rooted vines)

Beta Midseason. (*V. riparia* x Concord) Originated by Louis Suelter (pronounced *Sool*-ter) in Minn, 1881. Beta was named after his wife and is pronounced *Bett*-uh not *Bay*-tuh. Old standby, excellent for juice, jelly and jam. Decent eating off the vine when completely ripe. Medium-sized black berries in moderately compact to loose clusters. Early to bloom, early to ripen. Vigorous healthy productive vines, extremely hardy. Z3.

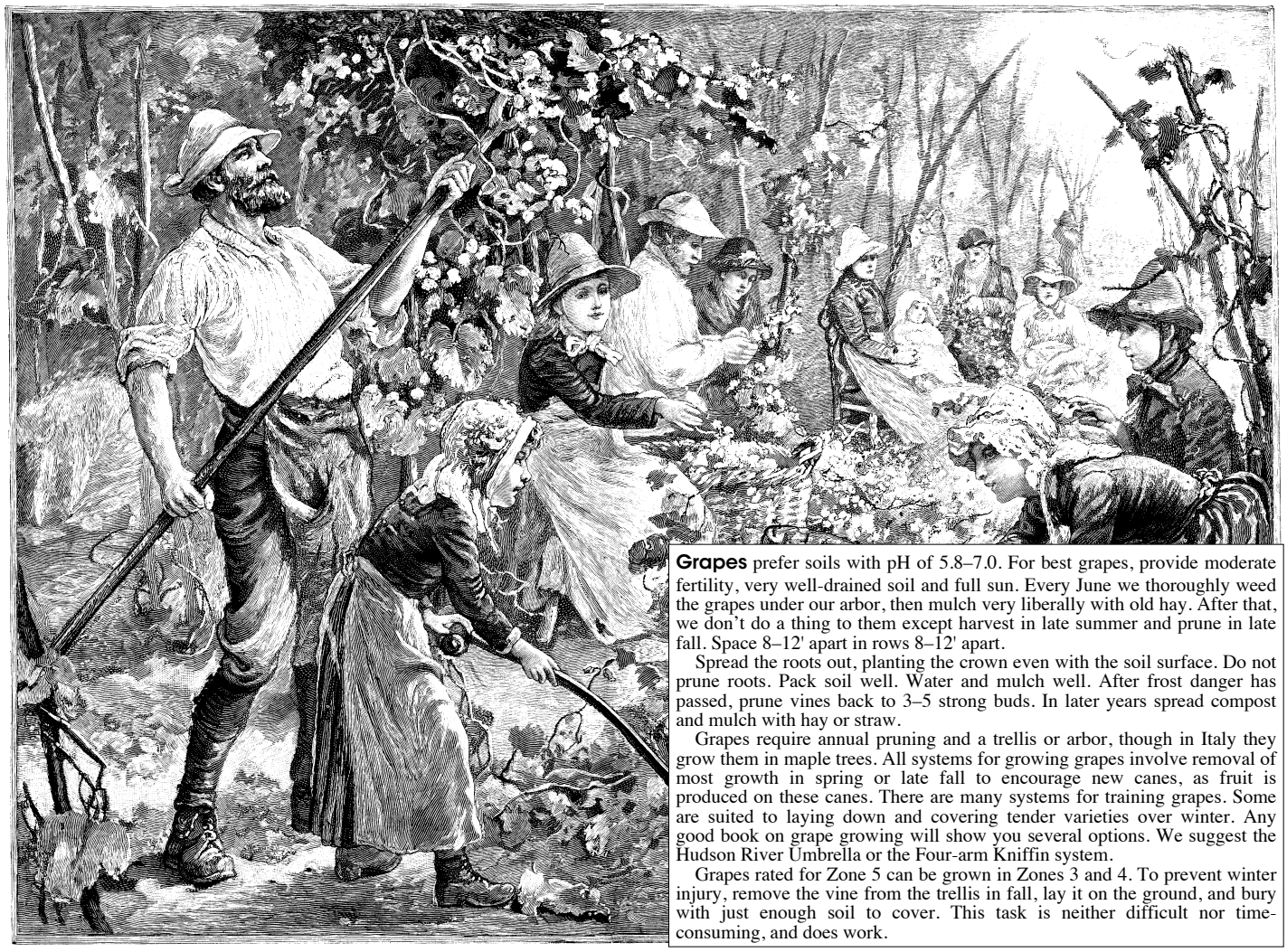
2370 Beta Grape, $10.00

Bluebell Mid. MN 158 (Beta x unknown) Developed by JM Dorsey, U Minn, 1944. Our most popular seeded grape; it does everything well. Extremely hardy, to –30˚, *labrusca* type ripens 2–3 weeks earlier than Concord. While it ripens beautifully from central Maine south, it may not have time to ripen in some northernmost locales. Delicious sweet flavor makes them excellent for fresh eating, jelly and juice. Clusters of medium-sized dark berries with a heavy blue bloom. Strong, productive, vigorous—but not rampant—vine. A joy to grow. Immune to most or all fungal diseases. Rare. Z3.

2380 Bluebell Grape, $10.00

Chontay Early. (Massasoit x Beta) Brookings, NE Hansen intro, SD Stn, 1925. A generally forgotten variety from the Upper Midwest that we've been trialing in our vineyard for the past 20 years. We like this grape. Medium-sized loose clusters of large purple fruit. Good fresh eating. In an old issue of the Minnesota Grape Growers *Notes from the North*, Tom Plocher wrote, "I have grown kind of fond of this grape for its beauty and spicy, fruity (but not labrusca) flavor, not to mention its hardiness. It was one of the few varieties that bore fruit this year following our –41˚ winter." Not considered a wine grape unless you like a strong-flavored brew. We have been pleasantly surprised with our "Chontay Palermo" 2008. Not bad! Vigorous vine. Z3/4.

2397 Chontay Grape, $10.00



Grapes prefer soils with pH of 5.8–7.0. For best grapes, provide moderate fertility, very well-drained soil and full sun. Every June we thoroughly weed the grapes under our arbor, then mulch very liberally with old hay. After that, we don't do a thing to them except harvest in late summer and prune in late fall. Space 8–12' apart in rows 8–12' apart.

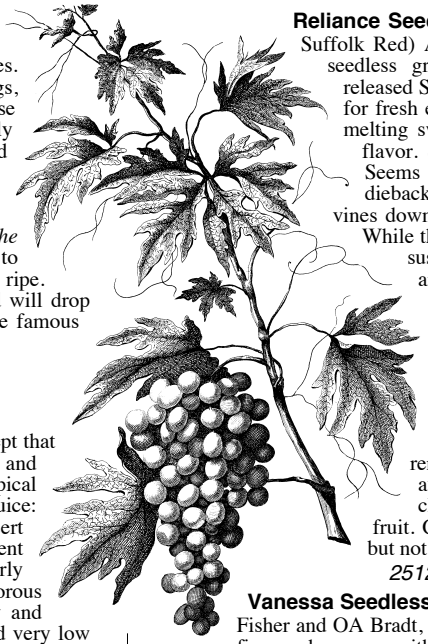
Spread the roots out, planting the crown even with the soil surface. Do not prune roots. Pack soil well. Water and mulch well. After frost danger has passed, prune vines back to 3–5 strong buds. In later years spread compost and mulch with hay or straw.

Grapes require annual pruning and a trellis or arbor, though in Italy they grow them in maple trees. All systems for growing grapes involve removal of most growth in spring or late fall to encourage new canes, as fruit is produced on these canes. There are many systems for training grapes. Some are suited to laying down and covering tender varieties over winter. Any good book on grape growing will show you several options. We suggest the Hudson River Umbrella or the Four-arm Kniffin system.

Grapes rated for Zone 5 can be grown in Zones 3 and 4. To prevent winter injury, remove the vine from the trellis in fall, lay it on the ground, and bury with just enough soil to cover. This task is neither difficult nor time-consuming, and does work.

Frontenac Mid-Late. MN1047 (*V. r.* 'RIP 89' x Landot 4511) U Minn, 1996. An excellent new hardy red wine grape from the University of Minnesota, suitable for rosé, red and port wines. Becoming a favorite in recent New England commercial plantings, including two within half an hour from here. Very large loose clusters of small berries. Vigorous very productive largely disease-free vines. Intense juice color, low tannins, high sugar and high acid content. Maine grape researcher and tester Jerry Rodman wrote to me, "Frontenac has made some good wines, but is very high in acid and is probably best for areas with high heat accumulation (which helps to lower its acid)." In *Notes from the North*, John Marshall adds, "Though the sugar may rise to impressive levels early in September, the grapes are not nearly ripe. Ignore the sugar levels and wait until September 20th. The acid will drop and the wonderful black cherry flavors that will make this grape famous will multiply." Z4/5.

2435 Frontenac Grape, $10.00



Frontenac Gris Mid-Late. Sport of Frontenac. U Minn, Excelsior, MN, 2003. Extremely hardy high quality Muscat-like white wine grape. Fruit is identical to the original Frontenac, except that skin color is reddish-grey instead of black. The wine is "crisp and clean with pronounced fruity flavors, primarily stone fruit and tropical fruit (especially pineapple) as well as hints of honey." High-acid juice: add sugar to balance acidity. Recommended for semi-sweet, dessert or ice wines. Fast becoming very popular in Minnesota. In a recent Minnesota Grape Growers survey, plantings of "Gris" nearly equalled the original Frontenac, exceeded only by Marquette. Vigorous vine bears heavily. Moderately susceptible to powdery mildew and foliar phylloxera. Low to moderate susceptibility to black rot and very low susceptibility to downy mildew and bunch rot (including botrytis). Soil adaptable but requires good drainage. Z4 or maybe Z3.

2436 Frontenac Gris Grape, $10.00

La Crescent Midseason. MN1166 [St. Pepin x (Elmer Swenson selection from *V. riparia* x 'Muscat Hamburg')] U Minn, 2002. High-quality Riesling- or Vignoles-type white wine grape. Best as a semi-sweet or dessert wine. Golden yellow-green fruit. In the Summer '08 Minnesota Grape Growers *Notes From the North* Mark Chien wrote about a wine trip to New England, "La Crescent was consistently a very attractive aromatic white wine with tons of fruit and reminiscent of an edelzwicker-type blend of Gewurztraminer-Riesling and other Germanic varieties. It would be a killer tasting room wine.…Probably the best wine I tasted was a…white called Black Sparrow made from a blend of Prairie Star/Frontenac Gris/La Crescent. It made me think of a NZ Sauvignon Blanc…could be poured with pride anywhere." Very vigorous "rampant" vine. Somewhat susceptible to black rot and downy mildew, though primarily on the leaves, not the fruit. Extremely hardy. Z3.

2458 La Crescent Grape, $10.00

Marquette Mid to Late. MN 1211 (MN 1094 x Rivat 262) U Minn, 2006. A wine grape that many northern growers have long awaited. One parent, MN 1094, has both *V. riparia* and *V. vinifera* in its background. The other, Rivat 262, is a French hybrid with pinot noir as one of its parents. Not only is Marquette heavy with *vinifera*, the vines are also extremely hardy. And there's more: sugar levels are high—in the range of 26.1 Brix—and the acid levels are lower than Frontenac. Substantial tannins will add complexity to your "pinot noir"-style red table wine. Small-medium bluish-black berries in small-medium sized clusers. Ripens a few days before Frontenac. Z3

2465 Marquette Grape, $10.00

Prairie Star Mid. ES 3-24-7 (ES 2-7-13 x ES 2-8-1) Swenson intro, U Minn, 2000. Blocky long slightly loose clusters of medium-sized white fruit. Excellent sugar and acidity for winemaking. Makes a nice classy varietal with no foxy flavor. Tom Plocher and Bob Parke reported in *Notes from the North* that the wine has "a fullness in the mouth and finish that is uncommon among our hybrids.…In some years it develops a delicate floral nose that allows it to stand as a single variety wine. In most years however, Prairie Star is an ideal blending component to add body and finish to thin white wines." We recommend blending with Louise or St. Pepin. A favorite of Jerry Rodman who has tested dozens of grape varieties at his Litchfield, ME, vineyard. Prefers heavier fertile soils. Disease-resistant and very hardy. Z3/4.

2480 Prairie Star Grape, $10.00

Reliance Seedless Very Early. Arkansas 1163 (Ontario x Suffolk Red) Arkansas Stn, 1982. Still the highest-quality seedless grape for the North, although the recently released Somerset Seedless is looking pretty nice. Good for fresh eating or juice. Large loose clusters of tender melting sweet pinkish-red fruit with a strawberry-like flavor. Stores well in a root cellar for 1–2 months. Seems hardy although it has shown significant dieback in our Zone 4 trials. You may need to lay vines down for the winter in colder areas (see sidebar). While the literature cautions about Reliance's disease susceptibility, our vines have performed well and have remained disease-free. Z4/5.

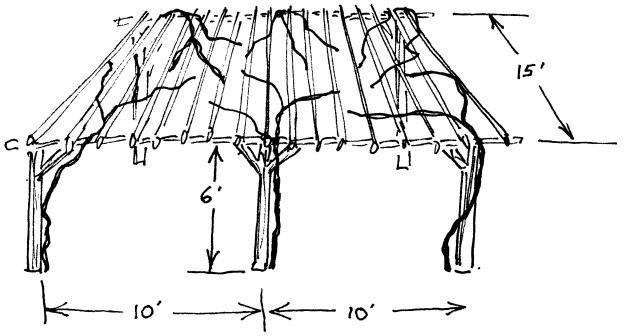
2485 Reliance Seedless Grape, $10.00

Somerset Seedless Early. ES12-7-98 (ES5-3-64 x Petite Jewel) Swenson intro. Although not as hardy as Beta, Bluebell and Chontay, Somerset is likely the hardiest seedless grape available today. One of the last Swenson introductions before the renowned and beloved grape breeder passed away in December 2004. Medium-sized loose clusters with small sweet ruddy reddish-golden fruit. Crispy texture and great flavor. Easy to grow but not overly vigorous. Z4.

2512 Somerset Seedless Grape, $10.00

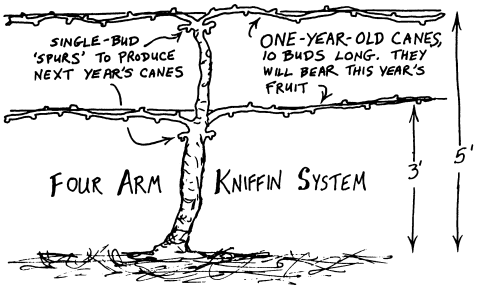
Vanessa Seedless Mid. Seneca x NY 45910. Introduced by KH Fisher and OA Bradt, Vineland Station, Ontario, 1983. Large bright firm red grapes with a fruity flavor. Medium-sized well-filled cluster. Don't forget to prune this very vigorous vine. Will ripen a month before Concord, so ripening in central Maine would not be a concern; however, hardiness might be. Considered hardier than Himrod though probably not as hardy as Canadice. Z4/5. **ME Grown.**

2537 Vanessa Seedless Grape, $10.00



Growing Grapes on an Arbor

Train one or more vines onto an arbor or gazebo. We have 8 vines, spaced about 10' apart. Encourage several permanent arms off the trunk of each vine and then every winter remove 70-90% of the the past summer's growth. Next summer new fruiting canes will grow off the permanent arms.


SINGLE-BUD 'SPURS' TO PRODUCE NEXT YEAR'S CANES
ONE-YEAR-OLD CANES, 10 BUDS LONG. THEY WILL BEAR THIS YEAR'S FRUIT
FOUR ARM KNIFFIN SYSTEM
3'
5'

Pruning Grapes in the Four-Arm Kniffin System

First year: Cut plant back when planting to a single stem, 6" long with two to three buds, after the last danger of frost has passed.

Second year: Set up two wires, 3' and 5' high, stretched between posts. Cut plant back to a single stem, 6 feet long and tie it to the top wire. Leave 4-6 buds near each wire and remove others.

Third year: Select 8 canes, 4 for each wire, and remove the rest. Tie two canes to each wire, one in each direction. Cut these four canes back to 10 buds each. Cut the remaining four canes back to one or two buds each.

Later years: In the spring, remove last year's fruiting canes. Select eight new canes. Cut 4 of them to 10 buds each, and tie them to your wires. Cut the remaining four back to two buds each. These will produce next year's fruiting canes. Remove all other canes. The number of buds left on the fruiting canes may be adjusted to encourage more fruit or larger size.

Raspberries *Rubus* spp.

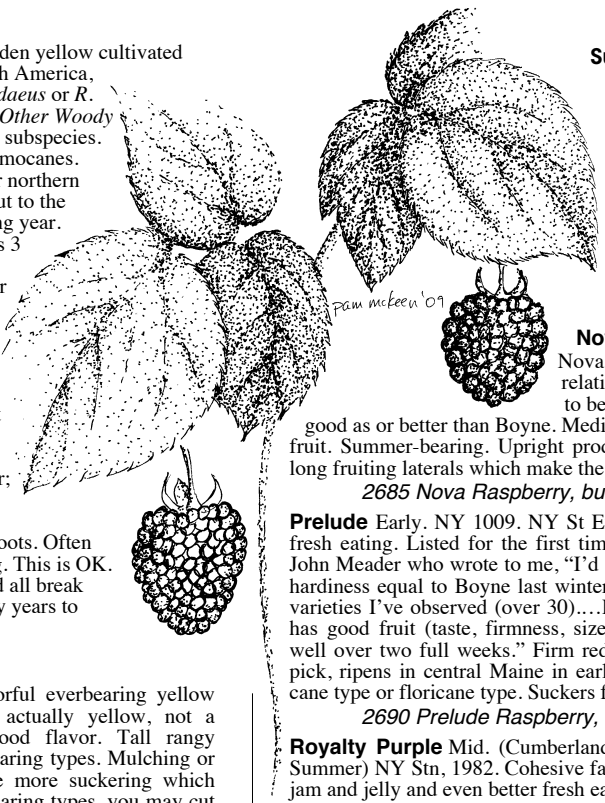
The ruby red and golden yellow cultivated raspberries growing in the garden are native to North America, Europe and Asia. They are usually identified as *R. idaeus* or *R. i.* var. *strigosus*. Hyland and Steinmetz's *Trees and Other Woody Plants of Maine* lists 53 different *Rubus* species and subspecies.

Everbearing types bear on first-year canes or primocanes. Everbearing raspberries are particularly valuable for northern growers because they can die to the ground (or be cut to the ground) and still produce a sizable crop the following year. Most everbearers ripen too late for growers in Zones 3 and 4 and cold areas of Zone 5. We don't offer Heritage, a popular producer of high-quality fruit for that reason. This year we are offering Polana, one of the earliest-ripening everbearing varieties.

Summer-bearing cultivars bear on second-year canes or floricanes. Harvest leaves for medicinal use from first-year canes. A leaf and fruit vinegar is very high in minerals, and the leaf tea makes a great tonic for both uterus and prostate.

A second variety is not needed for pollination. Prior to planting, soak canes in Agri-gel (see sidebar; available here or in the Organic Growers Supply section of the Seed catalog.

Please note: Raspberries have very fine, fibrous roots. Often they do not sprout from the plant stem after planting. This is OK. Be patient! Keep them well watered and they should all break dormancy, sprout from the roots and thrive for many years to come. (well-rooted bare-root canes)



Everbearing Raspberries

Anne Late. JEF-b1 (Amity x Glen Garry) Flavorful everbearing yellow raspberry, ripens earlier than Kiwigold and is actually yellow, not a washed-out pink. Large cohesive fruit with good flavor. Tall rangy productive plant may sucker less than other everbearing types. Mulching or adding organic matter to the soil will encourage more suckering which should, of course, improve yield. Like other everbearing types, you may cut it right down to the ground after the season (see sidebar). Z4.

2562 Anne Raspberry, bundle of 10, $20.00

Polana Late. Heritage x Zeva Herbsternte. Research Inst of Pomology and Floriculture, Brzezna, Poland, 1991. Very early fruiting everbearing red raspberry has performed very well in our Fedco trials. Ripens in late August or early September in northern districts. According to David Handley, "as near a thing to a sure bet." Large firm berries with very good flavor on vigorous and productive short canes. Easy to pick: the berries hang off the tops of the plants. Suckers freely.

2606 Polana Raspberry, bundle of 10, $20.00

Raspberries and Blackberries

Cane fruits have shallow perennial roots and biennial fruiting canes. They prefer full sun, good air circulation, and well-drained soil rich in organic matter, with pH of 5.8–6.2. Avoid soils where tomatoes, peppers, potatoes, strawberries or wild brambles have grown because they all are subject to verticillium wilt, which may remain in the soil. Plant rows 6–12' apart to facilitate cultivation. See below for planting distances. Before planting, work into the soil 15 bushels dry manure or 10 bushels fresh manure per 100 sq feet. A well-kept patch can last for 10–20 years.

Be sure each hole is large enough to spread out the roots. Do not allow the fine roots to dry out. We suggest soaking roots in Agri-gel for 1–2 hours before planting. Plant 1–2" deeper than in the nursery and then cut the canes off at ground level.

Cane fruits should be trellised between two temporary or permanent wires about 3–4' off the ground and 18–36" apart. Mulch with a thick layer of woodchips or sawdust. Fertilize liberally each spring with up to 100 lbs manure or compost, 8 lbs bloodmeal or 14 lbs cottonseed meal per 100 foot row. Plants require 2" water per week during the growing season.

• Summer-bearing raspberries: Space 2' apart. After harvest, prune to the ground the canes that carried fruit (or remove them the following spring). Thin the fresh first-year canes to about 3–4" apart. They will bear fruit next year. During the growing season cut back canes to 5' if they are bending over severely.

• Purple and black raspberries: Plant in hills 3' apart. Basic pruning is same as summer-bearing varieties. As they fill in, thin to 5–8 canes per hill. During the early summer, pinch back tip of first year canes to 2½–3' tall. This will encourage lateral fruiting branches. These will need very little, if any, support and may not require trellising. In the following spring, cut these fruiting laterals back to 8–12 buds.

• Everbearing raspberries: Plant 9–15" apart. Because everbearing types bear fruit on first-year *and* second-year canes, you have a couple of options. In warmer districts (or for northern New Englanders with an adventurous spirit), you can leave the first-year canes to overwinter after they fruit. The following year, you will get a light crop in early summer from those *now* two-year-old canes, followed by a larger crop later from the new first-year canes. In colder areas generally you would cut all canes to the ground in late fall after the leaves drop, or in early spring; new first-year canes will fruit in mid-late summer.

• Space blackberries 3–4' apart.

Summer-bearing Raspberries

Killarney Early. (Chief x Indian Summer) Morden Station, Manitoba, 1961. Produces medium-to-large round crumbly fruit of excellent quality over a long season. Summer-bearing cultivar ripens after Prelude and before Nova. Sister of Boyne, but firmer texture and brighter color. Sturdy 4' canes. Yields consistently. Extremely hardy. Z3.

2660 Killarny Raspberry, bundle of 10, $20.00

Nova Mid. (Southland x Boyne) Kentville, Nova Scotia, 1981. Midseason red introduced relatively recently. In our trials Nova appears to be hardier than Boyne with fruit quality as good as or better than Boyne. Medium-sized firm somewhat acid bright red fruit. Summer-bearing. Upright productive minimally spiny canes produce long fruiting laterals which make the fruit easy to pick. Z3.

2685 Nova Raspberry, bundle of 10, $20.00

Prelude Early. NY 1009. NY St Exp Stn. The best berry for early-season fresh eating. Listed for the first time in 2007 at the suggestion of grower John Meader who wrote to me, "I'd strongly recommend Prelude. It showed hardiness equal to Boyne last winter [2002-03] and fruits the earliest of all varieties I've observed (over 30)....Prelude would precede Boyne nicely; it has good fruit (taste, firmness, size) and seems quite productive; it fruits well over two full weeks." Firm red medium-sized fruit is easy to see and pick, ripens in central Maine in early-mid July. Can be grown as a primocane type or floricane type. Suckers freely. Z4.

2690 Prelude Raspberry, bundle of 10, $20.00

Royalty Purple Mid. (Cumberland x Newburgh) x (Newburgh x Indian Summer) NY Stn, 1982. Cohesive fairly firm large berries make outstanding jam and jelly and even better fresh eating. Their distinctive flavor is different from the red raspberries, with a hint of black-raspberry. Extremely robust minimally suckering plants are very productive and open-formed; the berries are right in your face and easy to pick. Ready to harvest when they are deep purple, somewhat later than the reds. Summer-bearing. Plant in hills (see sidebar). Usually considered Zone 4 but is proving itself into Zone 3 with occasional slight tip dieback. Does not like wet soil. Disease resistant. Z3/4.

2700 Royalty Purple Raspberry, bundle of 10, $40.00

Blackberries *Rubus* spp.

Borderland Beauty Extremely hardy blackberry rescued by Fedco grower Maurice "Moe" Thibodeau of Borderland Plant Nursery in Palmyra, ME. Moe explained to me that he first learned of the blackberry "on my neighbors' land well over a decade ago—my neighbor was about to dig up and destroy some blackberries his father had planted in the late '40s or early '50s. I asked him for some clumps—took 25 of them—he destroyed the rest. [He] told me his father had selected them for strong canes and abundance of big berries. [His mother] June Turner put up literally hundreds of canned items every year including jam made from these berries....[She was] a wonderful Maine woman who spent more than a little time explaining to me why this fruit or plant would be preferable to another. Borderland Beauty is one of those plants. I am grateful to her and her son who gave them to me." The abundant fruit is large thumb-size and sweet flavored. Canes reach 6–7' and tend to bear on the outside of the bushes. Z4 or maybe 3. **ME Grown.**

2731 Borderland Beauty Blackberry, bundle of 3, $15.00

Nelson's Blackberry Midsummer. This old-time blackberry variety has been surviving Maine winters for at least a century. Introduced to us by the descendants of Nelson Fronk whose 1928 family photograph taken on their farm northeast of Farmington shows the blackberry growing next to the barn. John Meader, who grows it for Fedco, calls it "exceptionally hardy," in fact, one of the most enduring blackberries he has ever grown. The inch-thick canes are tall, sturdy and upright. They can be grown on posts but also do well free standing. Fruit is moderately large, quite juicy and, when ripe, it has a sweet, true blackberry taste. What really makes this blackberry a standout is its high productivity: 16–18 blossoms on the central blossom stalk is the highest John has ever seen on a blackberry. He gets four good pickings from his patch over two weeks in mid-August. Nelson's makes excellent jelly and is good to eat right from the bush. Disease resistant and, like all blackberries, spreads quickly so give it room to move. We recommend planting in Zone 4 or maybe Zone 3. **ME Grown.**

2751 Nelson's Blackberry, bundle of 3, $15.00

Agri-gel A hydrogel formulation which absorbs and holds water. The swollen crystals adhere to plant roots, reducing transplant shock. Safe, non-toxic, easy to use. Useful for garden seedlings as well as woody plants. Highly recommended for raspberries and conifers. Half-ounce packet mixed with one to three gallons of water will treat up to 100 cane plants, or 50 trees and shrubs. *Not allowed for organic certification.* ½ oz.

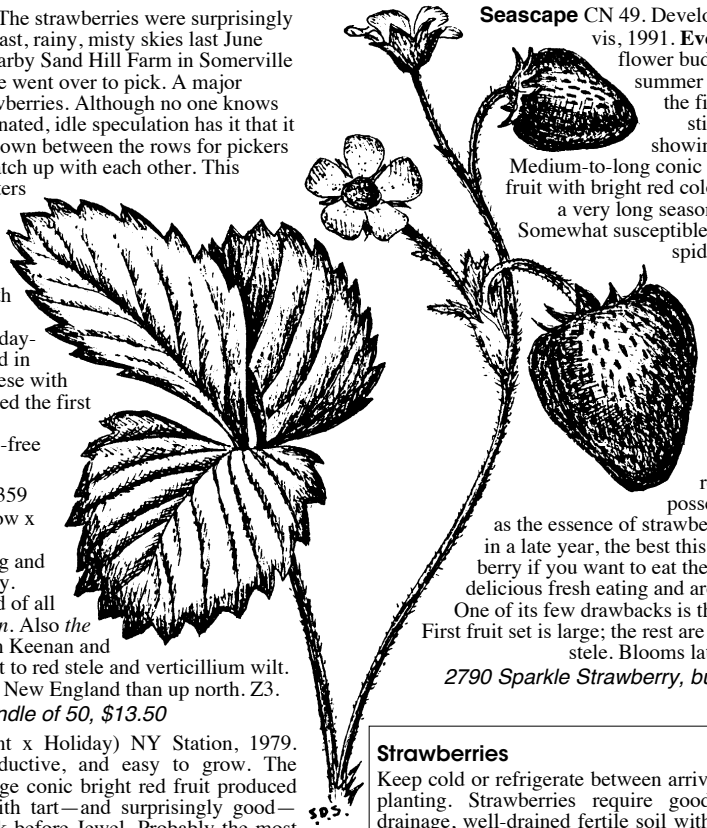
7510 Agri-gel, $2.50

Strawberries *Fragaria* x *ananassa*

The strawberries were surprisingly good this year, despite the endlessly overcast, rainy, misty skies last June and early July. The strawberry fields at nearby Sand Hill Farm in Somerville were abuzz with activity both mornings we went over to pick. A major highlight of every summer is picking strawberries. Although no one knows where the common name *strawberry* originated, idle speculation has it that it comes from the practice of putting straw down between the rows for pickers to sit on while they sample the fruit and catch up with each other. This summer we did see more stoopers than sitters so maybe less fruit was consumed *gratis*. One meager consolation for the farmers.

Modern strawberries, developed about 1830, are a hybrid of *F. chiloensis* (native of Chile) and *F. virginiana* (native of North America). Royce Bringhurst of the University of California-Davis developed day-neutral strawberries from wild plants found in Utah's Wasatch Mountains. He crossed these with modern commercial varieties and introduced the first day-neutrals in 1980.

50 plants will plant from 50-100'. (virus-free bare-root stock)



Earliglow Early. MDUS 3861 [MDUS 2359 (Fairland x Midland)] x [MD2713 (Redglow x Surecrop)] Maryland Ag Exp Stn, 1966. Medium-sized berries. Best for fresh eating and freezing. Excellent flavor for an early berry. Barbara Bowling called it the best flavored of all varieties in *The Berry Growers Companion*. Also *the* favorite of local strawberry growers Shaun Keenan and Benji Knisley of Sand Hill Farm. Resistant to red stele and verticillium wilt. Considerably more productive in southern New England than up north. Z3.

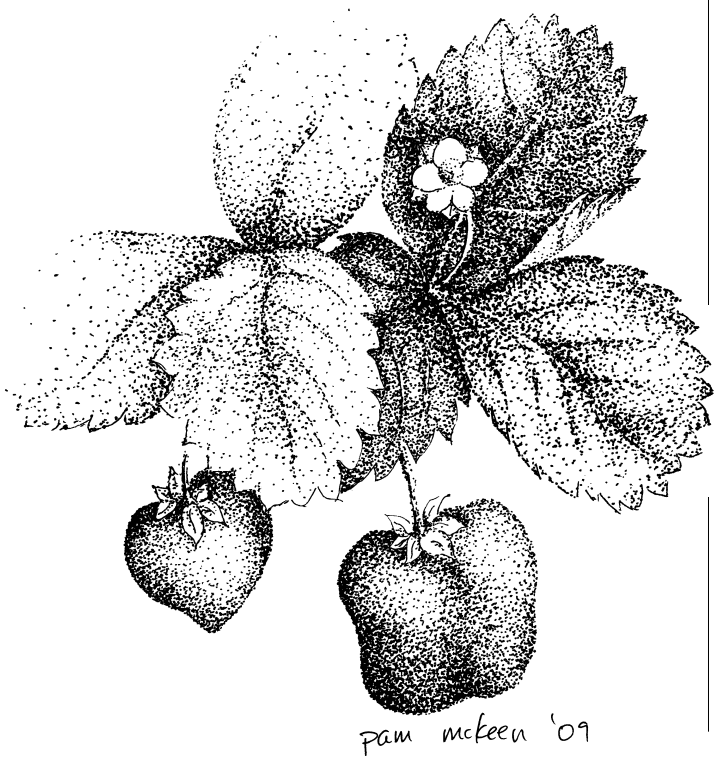
2770 Earliglow Strawberry, bundle of 50, $13.50

Honeoye Early-Mid. NY 1409 (Vibrant x Holiday) NY Station, 1979. Tough, hardy, vigorous, extremely productive, and easy to grow. The freezer-filler of the strawberry patch. Large conic bright red fruit produced over long fruiting season. Firm flesh with tart—and surprisingly good—flavor. Excellent freezing quality. A week before Jewel. Probably the most popular commercial berry in the Northeast. Plant in well-drained soil to avoid red stele. Susceptible to verticillium wilt. Z3/4.

2775 Honeoye Strawberry, bundle of 50, $13.50

Jewel Mid-Late. NY 1324 [(Senga Sengana x NY E-58) x Holiday] NY Stn, 1985. Shaun Keenan suggested that we add Jewel to our list; he even went so far as to say that Jewel tasted almost as good as Sparkle. Although I don't think I'd go quite that far, I was very impressed with the berry. Large bright red glossy perfectly shaped fruit is firm, sweet and slightly aromatic. Unlike Sparkle, Earliglow and many other varieties, it keeps its size all season. Extremely popular with commercial growers and Gene's favorite. Good freezing quality. Low incidence of fruit rots and foliar diseases. Not resistant to verticillium or red stele. Z4.

2780 Jewel Strawberry, bundle of 50, $13.50



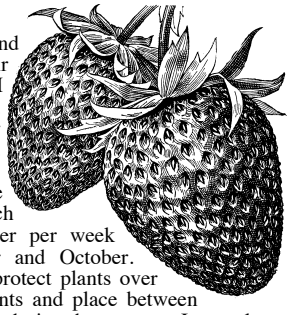
Seascape CN 49. Developed by Royce Bringhurst, U Cal, Davis, 1991. **Everbearing** day-neutral strawberry sets flower buds regardless of day length, fruiting all summer and into fall. Remove flower buds for the first six weeks after planting and you'll still get a crop the first year. Seascape is showing excellent results in Northeast trials. Medium-to-long conic high-yielding firm productive reliable fruit with bright red color and excellent flavor. Produces over a very long season. Broad resistance to fungal diseases. Somewhat susceptible to common leaf spot and two-spotted spider mite. Should be hardy in all but the coldest districts. Probably Z4.

2787 Seascape Strawberry, bundle of 50, $14.00

Sparkle Mid-Late. (Fairfax x Aberdeen) NJ Ag Exp Stn, 1942. Although not a favorite with commercial growers due to moderate crop size and smaller berries, I've yet to taste a strawberry that comes even remotely close to Sparkle. To me, they possess a flavor that can only be described as the essence of strawberry. The best in an early year, the best in a late year, the best this year, last year, every year. This is the berry if you want to eat the perfect strawberry. Soft berries make delicious fresh eating and are also excellent for jams and freezing. One of its few drawbacks is that it tends to lose color in the freezer. First fruit set is large; the rest are small. Resistant to most strains of red stele. Blooms late, rarely affected by spring frost. Z3.

2790 Sparkle Strawberry, bundle of 50, $13.50

Strawberries



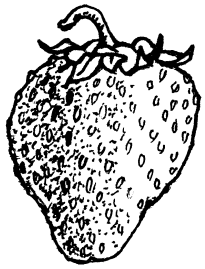
Keep cold or refrigerate between arrival and planting. Strawberries require good air drainage, well-drained fertile soil with pH of 5.8–6.2, thick mulch and full sun. Avoid soils where tomatoes, peppers or potatoes have grown in the past 4 years. Plant strawberries at the same depth as they were in the nursery, with the middle of the crown at soil level. Keep your patch free of weeds. They require 3/4–1" water per week during April, May, August, September and October. Mulch with hay or straw in late fall to protect plants over winter. In the spring, pull mulch off plants and place between rows where it will keep fruit dry and clean during the summer. It can also be raked back over the plants if frost threatens flower buds. Floating rowcover may also be used for winter and frost protection.

June-Bearing Strawberries

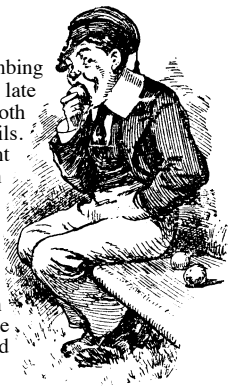
Matted Row system: Set plants 12–24" apart in rows 3' apart. Allow plants to produce runners freely and fill in the row. Remove all flowers the first year. Harvest berries the second summer. Immediately after harvest, fertilize liberally with compost or aged manure and renovate the row. By hand or with a tiller, narrow the row to 12" wide. Thin plants to 4–5" apart within the row. By this method a bed can last about 5 years. Then plow it under and start again.

Day-Neutral Strawberries (like Seascape) flower regardless of day length as long as temperatures are between 35 and 85°, and produce fruit from June to October. They are also uncommonly productive—about one pound of fruit per plant the first year, and slightly less the second year. Productivity peaks in August the first year. The second year, berry size decreases in the hottest weather and increases in cooler weather.

They are heavy feeders and benefit from 3–4" of manure worked 4–6" into the soil prior to planting, and monthly side-dressing of manure throughout the season. Plant 6–12" apart. Mulch with black plastic or thick straw immediately after planting. Remove flowers for the first six weeks, and remove all runners the first season. Mulch in late fall. Side-dress with manure monthly during the second season beginning in May. Till under after the second year and begin again.



More Edibles



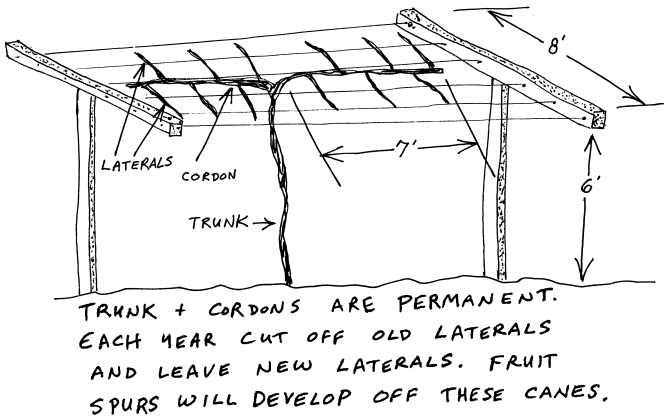
***Actinidia arguta* Hardy Kiwi** Productive climbing vine produces delicious grape-sized kiwi fruits in late summer. Unlike supermarket kiwis, the skin is smooth and edible. Easy to grow in rich well-drained soils. Will begin producing in 5–9 years. No significant pest or disease problems. Some growers have been frustrated with vines that have proven unproductive or not hardy. After consulting several of Maine's long-time growers, we collected cuttings from fruiting combinations here in central Maine. We think you'll be pleased with our choices. We'll be offering more varieties in the years to come. Both male and female plants required for fruit. One male will pollinate at least three females. Z4. (well-rooted 2-3-yr vines)

***A. a.* Michigan State** (female) Summer. Michigan State University. Grower Tom Vigue calls the thumb-shaped thumb-sized fruit, "sweet and most highly luscious." The fruit is a bit sour to my palate. Although it might make you wince, the overall experience is joyous and delicious. Larger than other varieties.

2829 Michigan State female Kiwi, $13.50

***A. a.* Meader Male** Hardy male kiwi suitable for pollinating Michigan State female. One male will pollinate several females. Vines are often grown just for their beautiful dark green ornamental foliage.

2834 Meader Male kiwi, $13.50



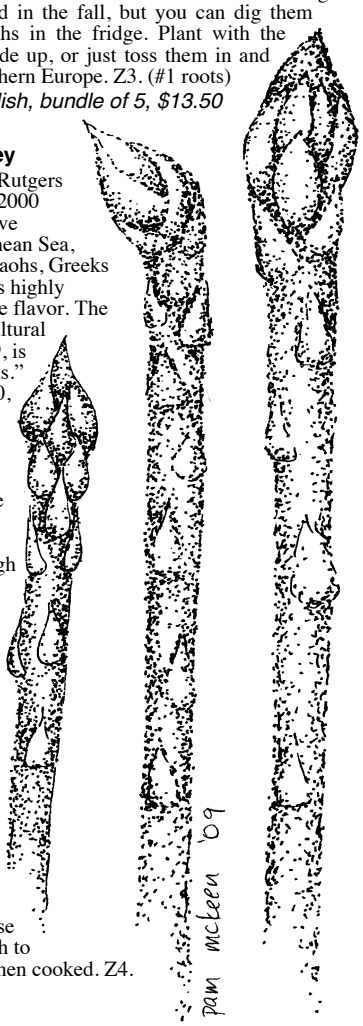
Kiwis are dioecious vines, meaning male and female flowers are on separate plants, so you must plant a male plant to pollinate the fruiting female plants. They are extremely vigorous and require a rugged trellis or arbor and heavy pruning. Plant vines 10' apart each way in moderately rich moist but well-drained soil (pH 5.0–6.5). One male will pollinate several females as long as they are within approximately 30' of the male. Although the vines are quite hardy, the flowers and foliage are frost sensitive. Planting on a northern exposure will delay budding in spring and reduce risk of frost damage. Protection from winter winds and intense winter sun is also recommended. Mulch with hay or wood chips. On poor soil fertilize with compost annually.

On a trellis: Train a single trunk to the trellis wires and then train two permanent 7–10' cordons (arms) off the trunk. Each winter remove at least 70% of old growth, leaving a dozen or so one-year-old laterals. That year's fruit will develop on fruit spurs growing off these one-year-old canes (laterals). On extremely rampant vines, summer pruning may be required to keep the vines from choking out your farm.

On an arbor or gazebo: Once established, prune 70% of the old growth each year and leave some new canes for this year's fruiting.

***Armoracia rusticana* 'Big Top' Horseradish** Exceptionally vigorous perennial with large dock-like leaves and spicy hot roots, savored for centuries for their culinary and medicinal qualities. Horseradish tea is said to be an effective control for brown rot on stone fruit. 'Big Top' is a newer strain with disease resistance. Deep taproot with numerous shallow runner roots. Choose carefully where you plant it because you may never get it all out. Even the tiniest root piece will produce a new plant. Prefers rich soil. Leaves can be cooked as greens. Roots are traditionally harvested in the fall, but you can dig them anytime. Roots keep 3–4 months in the fridge. Plant with the slanted cut down and the flat side up, or just toss them in and watch them grow. Native to northern Europe. Z3. (#1 roots)

2860 Bigtop Horseradish, bundle of 5, $13.50



***Asparagus officinalis* 'Jersey Supreme' Asparagus** Early. Rutgers U. A spring staple for well over 2000 years, asparagus is thought to have originated around the Mediterranean Sea, perhaps in Asia Minor. The pharaohs, Greeks and Romans were all aware of its highly nutritious qualities and delectable flavor. The earliest known American horticultural advertisement, from March 1719, is for "English Sparrow-grass Roots." Jersey Supreme, released in 2000, is an all-male hybrid which is more productive than the older all-male varieties. Occasionally females will show up in a planting. Leave them be or rogue them out as you wish. Excellent tolerance to asparagus rust and fusarium crown rot. Produces high yields of large-diameter tender spears. Z4. (large-rooted 1-yr crowns)

2872 Jersey Supreme, bundle of 25, $15.00

***A. o.* 'Purple Passion' Asparagus** Early. Developed from the Italian heirloom *Violetto di Albenga*. Brian Benson introduction. Very large deep purple stalk with a creamy white interior. Purple asparagus are actually a type of "white" asparagus shown the light. Sweeter and less stringy than its green counterparts, so you can use more of the spear. Tender enough to eat raw in salads. Turns green when cooked. Z4. (large-rooted 1-yr crowns)

2875 Purple Passion, bundle of 25, $15.00

Asparagus requires fertile soil with pH 6.8–7.2 and high levels of phosphorus. It doesn't like weed competition. Plant when you receive your order or as soon as the ground can be worked. Plant 14–18" apart, 6–10" deep, in trenches 4' apart. Or dig your trenches somewhat deeper and fill the bottom with 4" of compost and rotted manure. Lay plants with crown up and cover with 2" of soil. Plants emerge very slowly. As young shoots grow, add soil gradually, just covering the shoots, until the trench is full. In late fall, remove dead stalks and mulch with 3" of manure.

Second summer: Add lime, rock fertilizers, and nitrogen as needed. Control weeds but do not injure crowns.

Later years: Same routine but increase fertilizer. Be sure to leave some spears each year to grow stalks that will support the roots and give you more spears next year. Keep the bed weed free and mulched heavily.

New research shows that asparagus can be selectively harvested for 2 weeks during the second growing season, for 4 weeks in the third, and a full season thereafter. We recommend caution in harvesting. Before the third or fourth season, only the largest shoots from vigorous plants should be removed, as the young plants need to establish themselves.

***Rheum rhabarbarum* 'MacDonald' Rhubarb** MacDonald College, Quebec. Perennial herb of the buckwheat family, rhubarb's clumps of juicy acid leaf stalks have been a staple food and medicine every spring for thousands of years. Ben Franklin may have been the first to introduce rhubarb to North America. In 1770, while in England, he sent "some of the true Rhubarb seed" to John Bartram. By 1829 this Siberian plant was appearing in U.S. catalogs. Most famous these days for pies and wines, but also good for sauces, breads and juices. Rhubarb/apple sauce is a great way to use up the last of the root cellar apples, and rhubarb/juneberry pie is a great way to kick off the summer. MacDonald has extremely vigorous productive upright large tender stalks, deep red inside and out. Leaves not edible. Native to Russia. Z3. (#1 crowns)

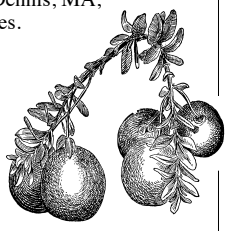
2880 MacDonald Rhubarb, bundle of 2, $15.00

Rhubarb
Plant the top of the root division level with the surface in well-prepared well-drained rich slightly acid soil (pH 5.5–6.5) and a bushel of well-rotted manure or compost under each crown. When plants are established, fertilize liberally with manure and balanced garden fertilizer or compost every spring, as it's a heavy feeder. Harvest for four weeks two years after planting. Thereafter you can harvest for 8-10 weeks each year. Never remove more than 2/3 of the stalks from a plant.

Every ten years or so, divide plants in early spring, leaving about 1/3 of the crown in place. Cut up the remainder into fist-sized pieces and replant.

***Vaccinium macrocarpon* American Cranberry** This is the cranberry of holiday sauces, bread and jelly. Dense low 2–12" lustrous evergreen ground cover, reddish purple in fall and loaded with 1/2" light yellow to orange to reddish-maroon berries that color more after harvest. Handpick or rake like blueberries before hard frost. Use fresh, freeze, or store in a cool basement or root cellar for months. Berries are a well-known cystitis remedy. Requires acidic soil, native to northeastern U.S. and Canada. Sold this year as a fibrous clump of 10 or more plants. Break up the clump into individual plants. One clump will fill a 5x5' bed. Z2. **ME Grown.** (well-rooted plants with at least 10 runners)

Howes American Late season. Eli Howe intro, East Dennis, MA, 1843. One of the "big four" traditional cranberry varieties. Medium-sized red fruit, ripens around October 5 in Massachusetts. Upright coarse vines with relatively few runners. Keeps well. Some disease resistance. Z3.



2891 Howes American Cranberry, $17.00

Stevens American Midseason. (McFarlin x Potters) H.F. Bain in Whitesbog, NJ, 1950. Part of huge USDA cranberry breeding program begun in 1929. Large deep red fruit keeps well. Productive vigorous vines. Z3.

2892 Stevens American Cranberry, $17.00

American Cranberries are shallow-rooted and require light acid soil (pH 4.0–5.5), preferably cool, moist and high in organic matter, similar to soil in which blueberries grow well. Will grow in dry locations. Though often flooded for frost protection and convenience in commercial operations, flooding is not necessary in home plots. Plant them in spring once the ground can be worked. They do well in a bed or in a naturalized setting. We no longer recommend mixing in sulfur to acidify the soil (see directions below). Sulfur is slow-acting and should be added to soil surface in subsequent years if necessary. Mixing it into the soil can damage tender young roots.

Instructions for a 5x5′ bed (10 plants):

For acidic "blueberry" soils: If you're fortunate to have a site where blueberries grow naturally, clear a spot of vegetation, cultivate the soil, add some peat and sand if you like, and you're ready to plant.

Sandy soils: Remove soil 10" deep and mix soil with 2 bales of damp peat moss. Replace mixture in bed and cover with 2" of sand.

Clay or silty soils: Remove soil 10" deep and place it around the edge of the bed as a berm. Replace the soil with a 50-50 mix of soil and peat (about 2 bales of peat). Cover with an additional 2" of sand. Plant cranberries 12" apart, so the roots are in the peat and the sand is covering the lower portion of the stems.

Remove all weeds as needed. Water the plants weekly so that the peat is moist but not saturated. Add nitrogen at a rate of 1/3–1 lb (or 20–50 pounds of manure) per 100 sq feet each year. No pesticides should be necessary.

Handpick before first hard frost when berries are red.

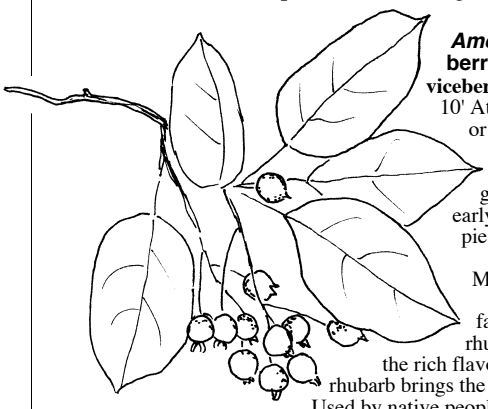
In late fall, cover the bed to protect the plants from the drying effect of winter winds. Use a mulch of leaves or pine needles; or cover with polyester row cover and then clear plastic; or cover with row cover and then plenty of leaves. If you use row cover or plastic, you may want to bait for mice under the plastic.

Remove mulch in early April. Protect flower buds from 28° frosts by covering with plastic during frosty nights.

Every two years partially cover the plants with a 1/2–1" layer of sand in spring before growth begins. This will help produce more berries and keep weeds down.

Fruiting Shrubs and Trees

These fruit-bearing trees and shrubs make beautiful hedges and attract birds and other wildlife. Many produce quite edible fruit as well. **Plant more than one of a kind to ensure pollination** for fruit production.



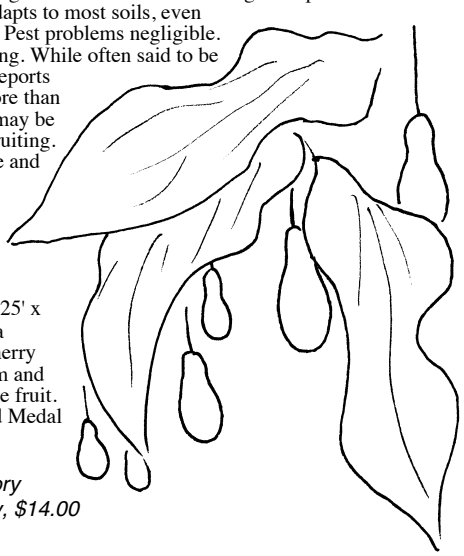
***Amelanchier alnifolia* Juneberry** Also called **Western Serviceberry** or **Saskatoon**. 4-20' x 4-10' Attractive multi-stemmed tree or large shrub with large (1/2") blueberry-like sweet purplish berries in July. Fragrant white flowers bloom in early spring. Berries are good in pies, cobblers, jellies, jams and cakes. Friend and northern Minnesota grower Del Stubbs recently wrote, "Our all-out favorite pie is saskatoons and rhubarb—the saskatoons bring the rich flavor, but have no acid, and the rhubarb brings the brightness—a perfect pair." Used by native peoples of the western prairies to make pemmican. Popular with wildlife. Nice red-orange fall color. Prefers slightly acid soil (pH 5–7). Thrives along stream beds as well as on rocky slopes. Tolerates partial shade, salt, pollution and wet spots but not standing water. Usually considered to be self-fruitful although we recommend a second tree to ensure decent pollination. Native to northwestern North America. Z2. **ME Grown.** (18-24")

2915 Juneberry, $14.00

***A. canadensis* Canada Shadbush** Also called **Serviceberry**, **Juneberry**, **Shadblow**, **Shad**, etc. 6-20' Northern New England has many Amelanchiers. Some are relatively easy to identify while others are nearly impossible. On top of that, some of them cross with one another creating natural hybrids. And, the common names are used pretty much interchangeably. So, how to tell this one from all the others? *Canadensis* is usually a rather short multi-stemmed suckering Amelanchier. Not a tree, but often confused with *A. arborea*. The *canadensis* in bloom is another of the wonderful signs of spring up north. Same purpley-black sweet juicy "Juneberries" as the others, though not cultivated for the fruit. Yellow and sometimes orange or red fall color. Found in moist thickets, swamps, open fields and hillsides. Native from Maine to South Carolina. Z3. **ME Grown.** (20-24")

2938 Shadbush, $14.00

***Cornus mas* Cornelian Cherry** 20-25' Large multi-stemmed shrub with oval to rounded form, or a small tree if you prune lower branches. Covered with small bright yellow flower clusters for 3 weeks in early spring, even before forsythia. Attractive long ovate leaves are shiny rich green. Bears profusions of dark red—almost black—small oblong cherry-like fruit from mid-late summer into fall. Fruit is variable but can be sweet, tart and tasty, and is traditionally used fresh, dried, pickled, in tarts, jellies, syrups and drinks. Best for fresh eating when dark red and slightly soft. Folkloric use for skin disorders, joint pains and stomach upset. Easy to grow, pest- and fungus-free and very long lived. Excellent as a hedge or specimen. Prefers well-drained soils but adapts to most soils, even shade. Drought tolerant. Pest problems negligible. Resistant to deer browsing. While often said to be self-pollinating, recent reports suggest that planting more than one variety or seedling may be essential to successful fruiting. Native to eastern Europe and western Asia. Z4/5. **ME Grown.** (14-20")



2990 Cornelian Cherry, $14.00

***C. m.* 'Golden Glory' Cornelian Cherry** 20-25' x 10-15' Golden Glory is a selection of cornelian cherry with a more upright form and 5/8" bright red cherry-like fruit. 2001 Pennsylvania Gold Medal Award winner. (9-12" transplants)

3000 Golden Glory Cornelian Cherry, $14.00

***Humulus lupulus* Common Hop** Late summer. Up to 20-30' Not only for brewmeisters, although it has been used for brewing for over 1000 years. Beautiful twining vine covers a trellis, an archway or the entire side of a barn with green lobed leaves, bristly stems, insignificant greenish flowers, followed by the hops themselves: papery aromatic cone-like strobiles that are used in beer and insomnia remedies. For brewing, there are basically two types of hops. Aroma hops have lower alpha acids and are used for flavoring, finishing or conditioning brews. Bitter hops have higher alpha acids and are used to impart bitterness. Tolerates shade, adapted to most well-drained soils. Dies back to the ground in fall and rebounds more vigorously each year. Plant it where you want it because it really takes over. No serious pests or diseases. Native to Eurasia. Z3. (5-6" female rhizomes)

***H. l.* 'Cascade'** USDA 19124 (Fuggle x Serebrianka-Fuggle S) x open-pollinated. Oregon St U, 1972. Fragrantly aromatic hop, low bittering value. A customer wrote, "While it's true that Budweiser waves a frond of this variety over their vats of 'sparkling, fermented rice and corn beverage,' Cascade has gained impeccable renown as *the* charismatic hop in such unsurpassable ales as Anchor's 'Liberty Ale', Sierra Nevada's 'Pale Ale' and McNeill's 'Firehouse Amber Ale'. Nothing 'light' about these." Resistant to downy mildew.

3030 Cascade Hops, bundle of 3, $15.00

***H. l.* 'Willamette'** USDA 21003 x Fuggle Seedling 2-4, USDA, 1976. Excellent all-purpose hop. Old English-style aroma with brewing characteristics similar to Fuggle. Low bittering. Spicy aroma. Good finishing hop for brewing English ales and stout. Vigorous. Higher yielding than Fuggle. Ripens midseason (late summer) and has good disease resistance.

3034 Willamette Hops, bundle of 3, $15.00

Hops

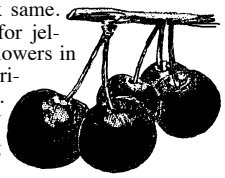
Refrigerate slightly moistened rhizomes in a plastic bag until planting. Hops prefer full sun and light-textured rich well-drained soil, with a pH of 6.5–8.0. As soon as soil can be worked in spring, till to create a weed-free area. Dig holes about 1' deep and at least 3' apart in rows. Add manure, compost and other slow-release organic fertilizers. Plant 2 rhizomes per hole, horizontally with the buds pointed up and cover with 1–2" of loose soil. The first year the hop plant requires frequent light watering and mulching.

Hops grow vertically, with lateral sidearms extending from the main vine and producing cones. Vines may grow up to 25' in a single season, and do best if they are trained onto strong twine 12–30' high, supported by a trellis, wire, pole, tree branch or south-facing building. When the young vines are about 1' long, select the 2 or 3 most vigorous vines per hill and remove the rest. Gently wrap the vines clockwise onto a string. Once trained, the vine will guide itself.

Pick the hops when they are papery but still slightly sticky and filled with yellow powder. Harvest dates will vary with the variety and climate. Because most hops are produced out of reach from the ground, it is safest to lower the vines in order to pick the hops. Dry hops thoroughly before use. Placed on a window screen in a dry attic, they will dry in a few weeks. Dried hops freeze well.

Cut the vines back to the ground after they have been killed by frost. Each spring apply a hearty topdressing of manure and compost. To help control vigor, prune roots by cutting a 2–3' circle with a shovel around the base of the plant in spring.

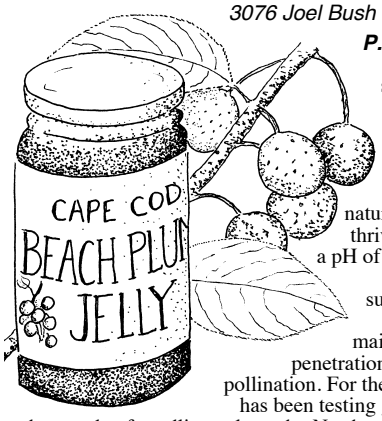
***Prunus besseyi* Western Sandcherry** 4-6' x same. Suckering shrub produces small plums suitable for jellies, pies and wildlife. Covered with pure white flowers in spring. The 3/4" purplish-black juicy fruit has variable flesh. Sometimes sweeet, sometimes sour. Can bear very heavy crops. Foliage is silvery grey turning bronze red in autumn. Likes sandy soil in the 5.3–7.5 pH range. Tolerates hot dry "plains" conditions. Spreads by rhizomes. Two or more seedlings or cultivars required for pollination. These are seedlings. Native from Manitoba to Colorado. Z3. (12-18" transplants)



3070 Western Sandcherry, $11.00

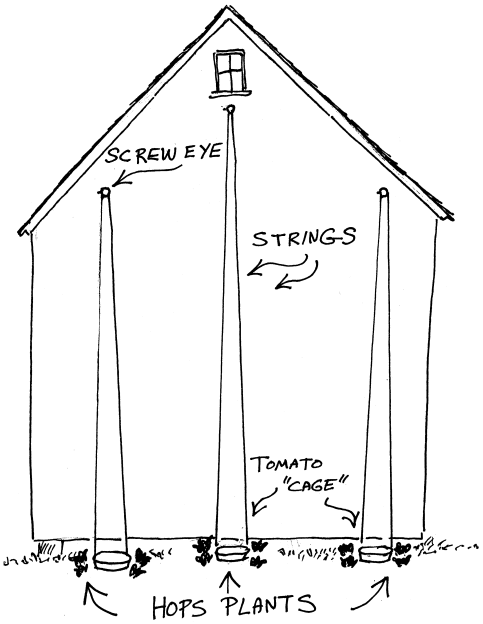
***P. japonica* x *P. jacquemontii* Joel Bush Cherry** 4x4' Elwyn Meader introduction, NH. The best of Meader's three bush cherries. Bears 3 or 4 quarts of freestone fruit per plant. Similar to Montmorency cherries, excellent for pies and jams. Because it ripens in September, the birds leave them alone, so there is no need to net the shrubs. Pink blossoms in spring are highly ornamental. Prefers well-drained fertile soil and full sun. Self-pollinating. Z3. **ME Grown.** (12-18" transplants)

3076 Joel Bush Cherry, $15.00



***P. maritima* Beach Plum** 6' x 5-6' Late summer. Rounded dense suckering shrub found along ocean beaches, New Brunswick to Carolinas. Purplish-red 1/2-1" fruit in late summer. Excellent jams, sauces, and especially jelly. Although typically found growing naturally in poor sandy soils, the plants thrive in well-drained fertile soils with a pH of 6–6.5. Additional fertilization will further increase productivity. We suggest an annual 5-gallon bucket or two of compost per plant. Prune to maintain an open center for good light penetration. Plant about 5' apart, at least 2 for pollination. For the past ten years, Cornell University has been testing growing techniques and evaluating thousands of seedlings along the Northeast coast. We'd like to offer named selections at some point. Salt tolerant! Native to eastern U.S. Z3. **ME Grown.** (9-30" transplants)

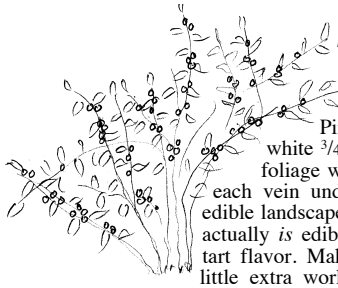
3082 Beach Plum, $11.00



The Hops Trellis

Locate your hop bed near your barn, garage, skyscraper or other tall building. Dig a hole about 3' deep in the growing bed for every 4–6 plants. Obtain tomato cages at a garden center. Bury the cage securely in the hole so that only the uppermost hoop is above ground. Tie 2 long rugged strings to the hoop. Then, tie them to a ring, timber, or window sill high above the ground—30 feet if you can do it. Plant 2–3 hops plants on either side of the hoop and train them to grow up the string. By the second year, you should have hops growing to the top. Detach string and lower the vines to the ground when ready to harvest.

Design courtesy of Brad Hunter.



P. tomentosa **Nanking Cherry** 6-10' x same. Broad dense highly ornamental shrub, becoming open and attractively irregular. Pink buds open to masses of fragrant white 3/4" flowers. Deeply veined light green foliage with very fine fuzz (tomentosa) lining each vein underneath. Excellent hedge plant: an edible landscape crop that produces a lot of fruit that actually *is* edible! Scarlet 1/2" fruit with very good tart flavor. Makes good pies but pitting requires a little extra work. (It might be time to invest in a cherry pitter. We have a wonderful small free-standing cherry/plum model called a Steinex-Combi by Westmark.) Covering plants with netting will deter birds from robbing your crop. Prefers full sun in well-drained soil. Plant two or more for pollination. Native to China and Japan. Z2. **ME Grown.** (12-18")

3100 Nanking Cherry, $11.00

Sambucus canadensis **Elderberry, Sweet** or **Black-Berried Elder** 6-12' x same. Broad vigorous multi-stemmed shrub with spreading branches and unkempt habit. The large flat creamy-white flower clusters (cymes) that cover the shrub in early summer make delicious fritters. Dry them for a wintertime cold and flu remedy tea. Purple-black berries in late summer used in jelly or pie are famous for wine and attract many species of birds, beneficial insects, and other wildlife. Descriptions of the old standard varieties have always been sketchy at best. Now we have a large collection on trial. We are in the process of sorting out the good, the bad, and the ugly. Trials are also being conducted nearby under the direction of the University of Maine and others. Best grown in moist rich soil. Free from diseases and insects. Two varieties needed for pollination. Native to eastern U.S. Z3.

S. c. **Adams No. 1** Selected by William Adams, Union Springs, NY, 1926. Vigorous strong productive bushes. Large berries and fruit clusters. (1-yr well-rooted plants)

3163 Adams Elderberry, $14.50

S. c. **Goodbarn** Chance seedling. Elwyn Meader introduction, Rochester, NH. Professor Meader named this 'Goodbarn' because it was the good elderberry growing under the eaves of his barn in New Hampshire. Another of the many fine plants that Elwyn's son John has brought to my attention over the years. Thanks, John! Goodbarn is thought to be a polyploid form of *S. c.* with unusual hardiness, vigor and apparent self-fertility. It blooms heavily and produces large crops annually. What it lacks in commercial fruit size it makes up for with its impressive productivity. **ME Grown.** (10-14" transplants)

3171 Goodbarn Elderberry, $14.50

S. c. **Johns** Unknown parentage, Nova Scotia Exp Stn, 1959. Very vigorous, up to 10' tall. One particular cutting in Jen's nursery grew five feet tall in one summer and had berries and flowers at the same time late into the summer! Said to be slightly less productive than Adams, but berries and clusters are larger; foliage darker. **ME Grown.** (12-15")

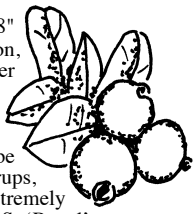
3179 Johns Elderberry, $14.50

S. c. **Wild Seedling** Fedco Staff member and grower Jen Ries has become our unofficial elderberry guru. She's been growing every variety she can find. If you have any varieties to share, let her know! These are seedlings she's been growing out at her Whiffletree Nursery in Brooks. Each one will be unique. Plant two or more for fruit production or use them as pollinators for any of our named varieties. **ME Grown.** (18-24")

3195 Wild Elderberry, $14.50

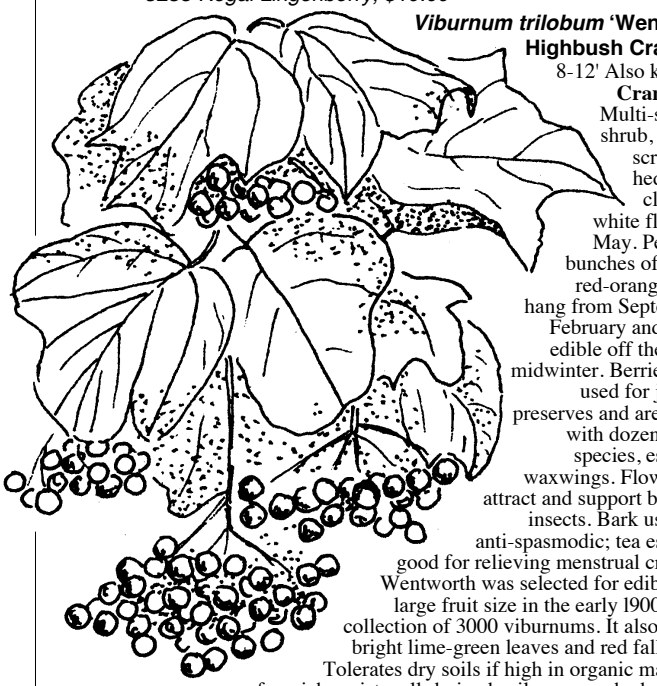
ME Grown = grown in Maine by a member of the Fedco growers coop

Vaccinium vitus-idaea **'Regal' Lingonberry** 7-8" x 36" University of Wisconsin-Madison introduction, 1994. Vigorous shallow-rooted spreading groundcover related to blueberries and cranberries. Bright glossy red nutritious fruit is slightly smaller than highbush blueberries. Tart until dead ripe, then quite good. Richer less astringent flavor than cranberries. Can be eaten fresh but primarily used in sauces, jams, syrups, juices and wines. Small shiny dark green foliage. Extremely popular in Scandinavia and now catching on in the U.S. 'Regal' is noted for its good flavor. Prefers full sun and poor sandy acid (pH 4.5–5) soils. If you've got good blueberries, try these. Each mature plant will produce a bit over 2 pounds. Ripens in late summer but is best after a frost. Harvest by hand or with a blueberry rake. Stores up to 2 months in the fridge. Plant 12–18" apart in rows 3–4' apart. Incredibly tough and very hardy. Self-pollinating. Native to the colder northern hemisphere. Z3. (small 1-year transplants)

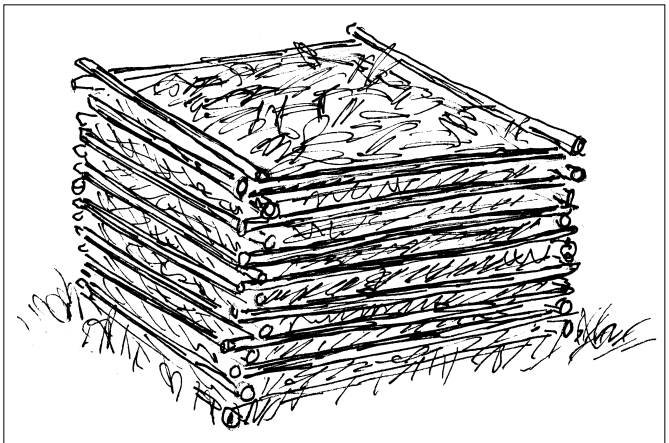


3238 Regal Lingonberry, $10.00

Viburnum trilobum **'Wentworth' Highbush Cranberry** 8-12' Also known as **Crampbark**. Multi-stemmed shrub, good for screens and hedges, has clusters of white flowers in May. Pendulous bunches of brilliant red-orange berries hang from September to February and are still edible off the bush in midwinter. Berries can be used for jams and preserves and are popular with dozens of bird species, especially waxwings. Flowers help attract and support beneficial insects. Bark used as an anti-spasmodic; tea especially good for relieving menstrual cramping. Wentworth was selected for edibility and large fruit size in the early 1900s from a collection of 3000 viburnums. It also features bright lime-green leaves and red fall foliage. Tolerates dry soils if high in organic matter, but prefers rich moist well-drained soils, sun or shade. Soil pH 6–7. Pollution tolerant. Susceptible to viburnum leaf beetle; check with your local extension office or nursery to determine if this could be a problem. Not a bog cranberry (see #**2891**-**2**). Native from Canada to NY. Self-pollinating. Z2. (9-12" transplants)



3245 Wentworth Highbush Cranberry, $10.00



The Compost Heap

Volumes have been written about compost and compost heaps. I'll spare you. But I will tell you how we make ours. We fabricate our heaps from 6-foot poles laid up log cabin style. As the pile goes up, add poles. No need to fasten the poles together. We use spruce and fir saplings from the woods. We always have about a dozen heaps going at one stage or another. If you need more on compost in general, try *The Complete Book of Composting* by J.I. Rodale, all 1007 pages!

Conifers transplanted once in the nursery have a much higher success rate. These conifers are mostly three- to four-year-old transplants. 2-2TR means the plant is 4 years old: 2 years as a seedling and 2 years as a transplant. P+2 means one year as a plug and 2 years as a transplant.

Abies balsamea **Balsam Fir** 45-75' Often considered the "only real Christmas tree." Fragrant needles are a favorite for wreaths, pillows and potpourri. Small blisters (which are fun to "pop" at other people) on younger trees contain a transparent aromatic resin that native peoples used as an inhalant for headaches and congestion, and as a poultice for burns, cuts and arthritis. Narrow, conical, smooth-barked. Prefers well-drained moist acid soils. Avoid polluted areas. Semi-shade tolerant, slow-growing. Good specimen tree and songbird nesting area, and a favorite browse of moose and deer. The most abundant conifer in Maine, "country of the pointed firs." Native Labrador to PA. Grown in Maine. Z3. (3-2TR 6-12")

3270 Balsam Fir, bundle of 5, $14.00

Metasequoia glyptostroboides **Dawn Redwood** 100' One of the most spectacular of all the ornamental trees. The wide irregular trunk looks like something out of a fairy tale with its iridescent golden-orange bark that becomes deeply grooved, hollowed and fluted with age. The bright green deciduous needles turn orange in the fall. Grows quickly, up to 50' in 15-20 years, with many small-diameter horizontal branches and a uniform conical habit. Highly adaptable, easy to transplant. Prefers moist deep well-drained slightly acid soil in full sun. Will tolerate wet or dry sites. Pollution resistant; good specimen or street tree, rarely needs pruning. Fossils dating back 50 million years have been found in Japan. Thought to be extinct until it was rediscovered in central China in 1941. Resembles California redwoods only vaguely. Native of China and Japan. Z4. **ME Grown.** (8-20")

3350 Dawn Redwood, $16.00

Conifers tolerate a wide range of soil conditions, but prefer a pH between 5.5–6.5. If you are planting in dry or well-drained areas, dip tree roots in Agri-gel solution before planting to protect roots from drying out. Do not use Agri-gel in heavy clay soils or wet areas. Do not soak conifers overnight; a good dipping is sufficient.

Before planting, prune off 1/3 of the roots. Dig a small hole or make an incision with a spade or planting bar and slip the tree in to the level it grew in the nursery. Fan the roots out; do not wind them around in the hole. It is much better to prune the roots than to crowd them in the hole. Water well and pack the earth down with your feet to remove air pockets.

Young conifers need 3/4-1" of rain per week. Periodic deep waterings are far more beneficial than frequent sprinklings. No fertilization is necessary in the first year. In later years you may fertilize around the drip line.

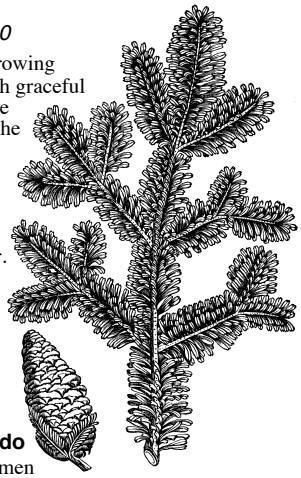
To make evergreens dense and compact, remove leader and center bud on the end of each side branch.

Agri-gel A hydrogel formulation which absorbs and holds water. The swollen crystals adhere to plant roots, reducing transplant shock. Safe, non-toxic, easy to use. Useful for garden seedlings as well as woody plants. Highly recommended for raspberries and conifers. Half-ounce packet mixed with one to three gallons of water will treat up to 100 cane plants, or 50 trees and shrubs. *Not allowed for organic certification.* 1/2 oz.

7510 Agri-gel, $2.50

Microbiota decussata **Russian Arborvitae** 1x35' Discovered in Vladivostok, Russia, 1921. Also called **Siberian Carpet Cypress**. One of the most beautiful of all low-growing evergreen groundcovers. Will crawl and spread almost indefinitely. Bright green dense foliage turns bronzy purple-brown in winter but does not burn. Prefers well-drained moist soil. Does not like clay but is pH adaptable and drought tolerant. Prefers sun but some shade is OK. Extremely hardy. Related to *Juniperus* but considered a distinct species, was originally thought to be a variation of *Thuja orientalis*. Z3. **ME Grown.** (12-18")

3360 Russian Arborvitae, $14.00



Picea abies **Norway Spruce** 80' Fast-growing wide-spreading upright picturesque tree with graceful long pendulous branches that often reach the ground. Largest of the spruce. If you go to the Mt. Auburn Cemetery in Cambridge, MA, don't miss the ancient Norway Spruce just inside the front gate. Several of its massive drooping branches have themselves turned into secondary trunks. It is truly amazing. Orange-brown scaly bark. Excellent lumber. Showy (marketable!) 4–6" cones. Bright green foliage. Prefers loam but does better than other spruces on poorer soils. Native to northern Europe. Grown in Maine. Z2. (2-2TR 9-18")

3400 Norway Spruce, bundle of 5, $14.00

P. pungens glauca **'Majestic' Colorado Blue Spruce** 30-60' Very popular specimen tree with truer blue foliage than other cultivars. Can be used as a screen, as it is fast growing after 3'. Does not like wet soil. Extra spring nitrogen will improve blue color, which doesn't appear for first few years. Native to western U.S. Grown in Maine. Z2. (2-2TR 9-18")

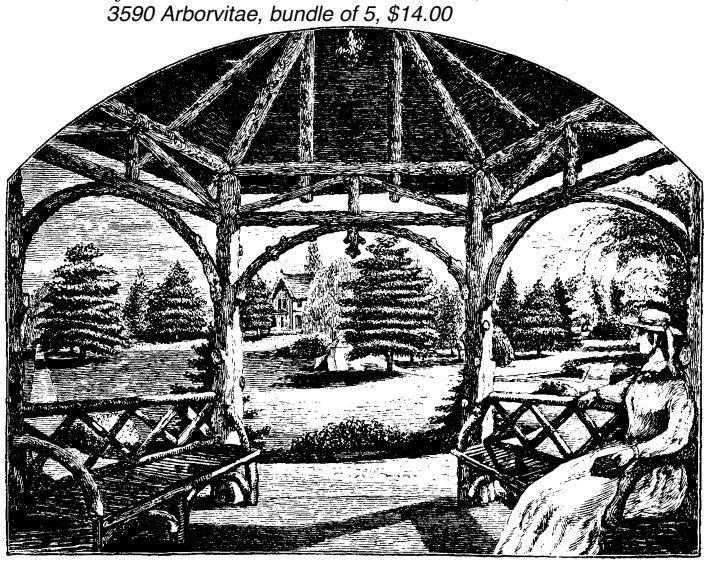
3420 Colorado Blue Spruce, bundle of 5, $14.00

Pinus koraiensis **Korean Stone Pine** 30-40' One of the small number of pines being grown for their edible seed. But be patient; it will take a few years. Or even more than a few years. Its loose branchy upright form and foliage habit remind me of white pine, while the greyish-brown sometimes pink scaly bark reminds me of red pine. The long blue-green needles however are considerably darker than those of our native pines. The needles also have an unusual silvery quality in the sun. And as the trees mature they produce 3 1/2–6" cones containing edible "pine nuts." Fine as a specimen or in groups. Grows wherever good pines will grow: think sand or gravel and low pH, avoid ledge if you can. Very adaptable, but slow growing. Native to Korea and Japan. Z3/4. (9-12")

3485 Korean Pine, $8.00

Thuja occidentalis **Arborvitae** 20-60' Arborvitae means tree of life. Also called **Eastern White Cedar**. Common throughout the entire state of Maine although some stands have been depleted by overcutting. Narrow and tall with twiggy branches, soft fibrous orange-brown bark, and flat foliage unlike that of any other conifer. Foliage and bark tea high in vitamin C. Foliage tea helpful in infections, twig decoction makes an anti-viral anti-fungal skin wash. Valuable light fragrant wood, the standard for fence posts and log cabins in Maine. Slow growing, lives up to 400 years. Thrives in rich moist marshy neutral-to-alkaline soils. Good for screens and hedges. Probably the first North American tree brought to Europe. Next time you're on Mount Desert, check out Thuja Gardens: beautiful cedars surrounding even more beautiful flower gardens. While you're there, visit Asticou Azalea Gardens, just down the road. Grown in Maine. Z2. (P+2 9-18")

3590 Arborvitae, bundle of 5, $14.00



Fedco Trees 2010

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❑ **Pickup** at Tree Sale in Clinton. Pay no shipping.

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- Please fill out the address information and totals blocks above. We *must* have a road name for UPS delivery.
- For early delivery of rootstock or for scionwood, send a SASE for the order form or download it from our website.
- If you require Priority Mail delivery, minimum shipping charge is $14 or 20% for orders with an adjusted total over $70.
- We will add a $10 handling fee if you ask us to make adjustments after we have received your order.
- We ship between April 1 and April 16; we will add a $15 handling fee if you specify a shipping date within this period or if you specify shipment around May 5.
- Consider donating your refund to the Maine Organic Farmers & Gardeners Association (MOFGA) Permanent Site Fund.

We accept Visa or MasterCard | Exp. Date

Fedco Trees 2010: Trees, Shrubs & Plants

	Item #	Number of pkgs.	Number of plants	Description	Price per package	Total Price
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If you are ordering more than 28 items, you may copy this page or our format and submit as many pages as you need.

Subtotal
(carry to other side)

Suggestions:

Fedco Trees 2010

PO Box 520 Waterville ME 04903

from mailing label CC-_____

Deliver to:

Farm or Group Name _____

Name _____

US Mail _____

Town _____ St _____ Zip _____

UPS (include your road name)_____

Town _____ St _____ Zip _____

phone _____ email _____

✓ Check this box if you will *not* accept substitutions ❑

Delivery Options ✓ choose one:

❑ **Ship** in April. Our last shipment is April 16.

❑ **Pickup** at Tree Sale in Clinton. Pay no shipping.

❑ **Ship** around May 5. (Add $15 fee to shipping charges.)

Order online
www.fedcoseeds.com
Check product availability.
Download catalogs
and additional order sheets.

Volume Discounts
(only orders received by 12/11/09)
Subtotal over $200 take 10%
over $400 take 15%

Shipping Charges: (we ship by UPS or Priority Mail, our choice)

	minimum	if your **Adjusted Total** is
New England	$7.00	over $70.00, pay 10% of adjusted total
NY, NJ, & PA	$9.00	over $90.00, pay 10% of adjusted total
All other states	$14.00	over $140.00, pay 10% of adjusted total

Orders to **Alaska** go Priority Mail; be sure we have a *Postal Address*

	minimum	if your **Adjusted Total** is
Priority Mail	$14.00	over $70.00, pay 20% of adjusted total

Subtotal from reverse		
Volume Discount	−	
Adjusted Total	=	
ME residents & pickups add 5% **Tax**	+	
Shipping	+	Remember the box charge!
Grand Total	=	

Shipping Charge		
+ Box charge	+	**$5.00**
Shipping	=	

Make checks payable to **Fedco**

Final order deadline March 12, 2010

❑ Donate all my refund to MOFGA
❑ up to $5.00
❑ up to $2.00

- **Complete ordering information on page 3.**
- Please fill out the address information and totals blocks above. We *must* have a road name for UPS delivery.
- For early delivery of rootstock or for scionwood, send a SASE for the order form or download it from our website.
- If you require Priority Mail delivery, minimum shipping charge is $14 or 20% for orders with an adjusted total over $70.
- We will add a $10 handling fee if you ask us to make adjustments after we have received your order.
- We ship between April 1 and April 16; we will add a $15 handling fee if you specify a shipping date within this period or if you specify shipment around May 5.
- Consider donating your refund to the Maine Organic Farmers & Gardeners Association (MOFGA) Permanent Site Fund.

We accept Visa or MasterCard | Exp. Date

Fedco Trees 2010: Trees, Shrubs & Plants

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If you are ordering more than 28 items, you may copy this page or our format and submit as many pages as you need.

Subtotal
(carry to other side)

Suggestions:

Nut Trees

When we toured farms in Italy a couple of years ago, we travelled along the olive's northern range. If winter temperatures dip to 21° you won't get olives next year and the trees will die to ground well before temperatures hit zero. I was curious about what northern Italians (and the French) would have traditionally used for oil. In times when people didn't travel much, I assumed it wasn't olives. I suspected it might be walnuts, and it turns out I was correct. Considerably hardier than olives, walnuts make really good oil. Cholesterol-lowering and high in potassium, zinc, copper and magnesium. The nuts and the oil played a key role in European life for thousands of years. Although American chestnuts have wonderful qualities, they are not an oily seed and therefore not a good oil source. Hazelnuts and their various hybrids, on the other hand, are very rich in oil, up to 60%, and can yield over 1,000 lbs per acre. We plan to increase our nut offerings during the coming years. Maybe it's time to create a New England oil industry, and not the kind that goes in your car.

At least two trees of each species are required for pollination.

Carya illinoensis **Northern Pecan** 70x70' Driving across the southern states some years ago I stayed with friends in Austin for the night. In the center of their dining table was an enormous salad bowl filled to the brim with pecans they had collected along the roadside the way we collect apples in October. Pecans love Texas. Native stands can also be found as far north as Illinois. Although they may be plenty hardy in much of the north, they do require summer heat and a warm fall to fill the nuts. Very large tree likes lots of room and clay or sandy soils rich with organic matter. Will take 3–4 years to establish a taproot. Then the trees should grow rapidly. Taproots do not like ledge! Z4. **ME Grown.** (18-24" transplants)

3716 Northern Pecan, $12.00

Castanea dentata **American Chestnut** Up to 100' Once again we're offering seedlings of pure American chestnuts, from seed collected in Maine by the Maine chapter of the American Chestnut Foundation. Before 1900, American chestnut was the predominant and most important deciduous tree in the eastern U.S. The arrow-straight rot-resistant wood was used for everything from mine timbers to musical instruments. Heavy annual crops of delicious sweet nuts were an important food for wildlife and humans. When cut down, the trees quickly grew back from the stump. The Asian fungus *Endothia parasitica* (chestnut blight) was discovered in Brooklyn in 1904; within 50 years it had killed virtually every chestnut tree in the eastern U.S. The blight does not kill the roots however, and rare isolated stands of mature trees can still be found. The trees we're offering are blight-susceptible, but will probably thrive if there is no active blight infection within a mile. Our two are still thriving after over 20 years. Fast-growing and straight-trunked with a wide-branching magnificent rounded crown. Fragrant white blooms in July. Ribbed sharp-toothed lustrous dark green foliage. Yellow fall color. Prefers well-drained acid soil. Two or more needed for pollination, but will cross-pollinate with Asian and European chestnuts. Precocious, bearing heavy crops of nuts in 10 years. From each American Chestnut purchase, Fedco will donate $4 to support the work of the American Chestnut Foundation. Z4. **ME Grown.** (8-10")

3760 American Chestnut, $18.00

Corylus spp. **Filberts** or **Hazelnuts**

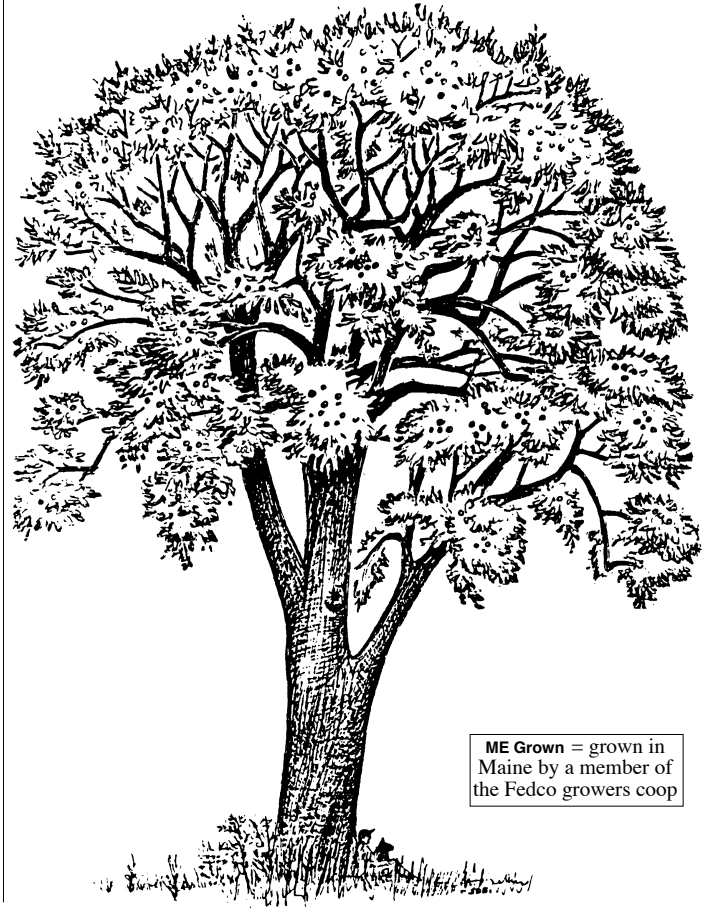
Suckering multi-stemmed rounded shrub or small tree with showy catkins in spring and edible nuts. One of six genera in the birch family, there are nine recognized *Corylus* species and many crosses. None are self-pollinating: at least two seedlings or clones must be planted for pollination. Plant 2–8' apart to create a hedge and ensure good pollination. Squirrels and blue jays will begin stealing the nuts as soon as they're ripe, so pay attention and collect the crop as soon as the husks begin to turn brown and lose their sticky yellowness. Cure nuts in their husks for a couple of weeks and then shell them. You can even stomp off the dry shells in a big tub as if you were juicing grapes. Prefers well-drained soils, with pH 5.0–7.0. Full sun or light shade. Annually cutting out some suckers will keep your stand from becoming too shrubby. Responds positively to an annual compost application.

C. **x** ***hybrid*** **Precocious Hazelbert** 12x12' This hybrid hazelbert (or hazelnut) was developed by Oikos Tree Crops in Michigan from selected filazels and hazelberts. It includes both American and European parentage. Fedco grower Anne Hallee received Precocious nuts from Oikos and has been growing them out. Vigorous shrubby suckering plant takes 3–4 years to bear. Medium-sized nut. Plant at least two for pollination. Good resistance to filbert blight. Z4. **ME Grown.** (24-36" transplants)

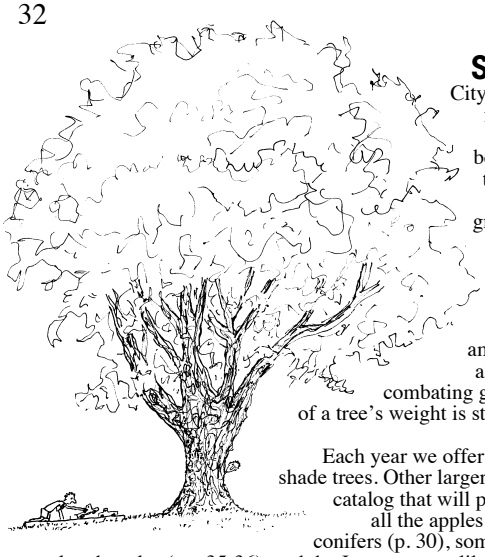
3799 Precocious Hazelbert, $18.00

Juglans nigra **Black Walnut** 70-90' Magnificent open rounded crown of massive limbs with dark green leaves. Highly valued cabinet and veneer wood. Thick-shelled edible nuts have an intense distinctive flavor. Their husks yield a rich brown dye. Husks, leaves and roots all have anti-fungal properties. Deep taproot. Prefers moist well-drained soils, pH 6–7. Roots give off a compound, juglone, which inhibits competing plants, so don't plant one too close to your garden. Space trees about 50' apart for nut production, 20' apart for lumber. Native to eastern U.S. though not quite into Maine. Z4. **ME Grown.** (24-36" transplants)

3815 Black Walnut, $13.00



ME Grown = grown in Maine by a member of the Fedco growers coop



Shade Trees

City street, country road, front yard, backyard, side yard: everyone benefits from planting these large trees. Not only do they lower ground-level temperatures in summer, buffer winter cold, provide valuable wildlife habitat, and store tremendous amounts of water, they also play a key role in combating global warming. 50% of a tree's weight is stored carbon. In a big tree, that adds up.

Each year we offer some of our favorite shade trees. Other larger trees throughout the catalog that will provide shade include all the apples (pages 8–15), all the conifers (p. 30), some of the nuts (p. 31), several crabapples (pp. 35-36), and the Japanese tree lilac (p. 34).

***Acer rubrum* Red Maple** 50-60' Also known as **Swamp Maple**. Usually has a central leader and an upright growth habit, compared to the bushier sugar maple. In early spring the dark red flowers cover the driveway long before any leaves appear. In the fall the foliage turns electric orange, yellow, and brilliant red. Excellent in the yard. Does not have the weak branching problems of silver maple or the invasive "qualities" of the abominable Norway maple. Sometimes tapped for sap in spring. Transplants easily. Prefers moist acid conditions but is adaptable to dry locations. Note that this is *not* the red-leaf maple *A. platanoides* 'Crimson King'. Native to eastern North America. Z3. **ME Grown.** (3-4' transplants)

3985 Red Maple, $14.00

***A. saccharum* Sugar Maple** 50-100' Largest of our native maples, also known as **Rock Maple**, valued for shade, syrup, and lumber. Traditionally a pair of sugar maples was planted in front of a farmhouse on the inhabitants' wedding day. Those "wedding trees" still grace many Maine front yards after all these years. Famous for its yellow gold scarlet and crimson fall foliage and its fresh sap which is boiled down to make real maple syrup. Huge upright spreading form with light grey bark. Shade tolerant, making it easy to interplant in existing woods. Prefers moist, well-drained soils. Cold hardy. Susceptible to salt and air pollution; not a good city tree. Native Quebec to Gulf Coast. Z3. **ME Grown.** (3-5')

3990 Sugar Maple, $14.00

***Betula alleghaniensis* Yellow Birch** 60-75' x 40-50' Also called *B. lutea*. Although yellow birch can grow to be quite large, those growing here in our woods tend to be rather modest and irregular in form, snuggling themselves into shady niches along the streams and seasonally wet spots wherever they can find a space. Somewhat rare and coveted in central Maine. Although lacking the popular white bark of the paper birch (*B. papyrifera*) this is none-the-less a magnificent tree. The deep dark golden-yellow shredding exfoliating bark glows and dazzles in the woods. Yellow fall color. I have hand planes made of its very hard dense high-quality wood. Makes beautiful flooring too. Like sweet birch (*B. lenta*), the twigs are a source of oil of wintergreen. They don't mind shade. Moist or wet soil, acid or alkaline but avoid standing water. Native to eastern North America. Z3. **ME Grown.** (4-5')

4006 Yellow Birch, $14.00

***B. lenta* Sweet Birch**, **Black Birch** or **Cherry Birch** 40-80' x 35-45' Medium-sized tree with a rounded irregular wide-spreading crown. Glistening smooth reddish-brown to black bark forms plates on mature trees. Foliage turns golden-yellow in fall. This is the birch to use for your birch beer, which is brewed from the copious sap. Once the main source of oil of wintergreen, twigs, wood, young leaves and inner bark all have wintergreen flavor and medicinal efficacy. Chew dormant twigs, or brew a delicious tea from twigs and leaves. Whatever twigs and catkins you don't eat, the birds and deer will be glad to nibble. Sun to part shade. Prefers deep rich moist slightly acid well-drained soils, but adapts to most conditions except heavy clay. Native to eastern U.S. Z3. **ME Grown.** (3-5')

4009 Sweet Birch, $16.00

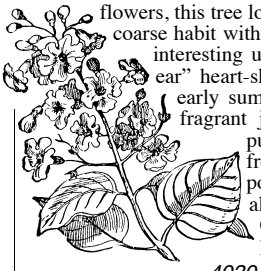
***B. nigra* 'Cully' Heritage River Birch** 60-80' x 25-35' Dense graceful oval spreading tree with highly attractive peeling exfoliating whitish-pink salmon-orange and lavender bark that transforms into dark redddish-pinkish-brown ridged plates in mature specimens. Fast-growing species found along stream banks and riparian areas although Heritage does well on drier sites, including urban environments. Requires slightly acid soil; will do poorly in alkaline soils. Resistant to leaf spot and bronze birch borer. Was the Society of Municipal Arborists "2002 Urban Tree of the Year." This year we are offering them as a clump of three trees. Native eastern US. Z4. **ME Grown.** (18-28")

4014 Heritage River Birch, clump of three trees, $22.00

***Carpinus caroliniana* American Hornbeam** 10-40' x same. Also known as **Blue Beech**, **Musclewood, Ironwood** and **Water Beech.** A small flood-plain or understory tree with long irregular crooked branches and smooth grey ribbed bark. Alternate names each refer to one of its wonderful attributes. Smooth grey bluish-tinted bark resembles beech. Musclewood refers to the sinewy ribbing of the trunk. Ironwood because of its incredible toughness, suitable for tool handles and oxen yokes. Water beech because it can thrive in a flood plain. Bronze-red tomentose foliage in spring turns a striking blue-green color with the season. Bright red, scarlet red and orange fall color all at the same time. Prefers deep rich moist slightly acid soil but will handle dry spots. Remarkably adaptable but does not like urban conditions. Full sun to full shade. Native from Canada to Central America. Z2. **ME Grown.** (3-4')

4025 American Hornbeam, $14.00

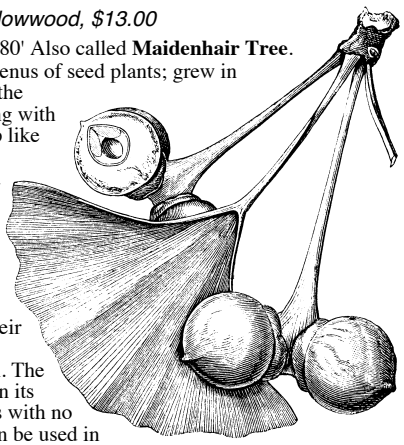
***Catalpa speciosa* Northern Catalpa** 40-60' Also known as **Western Catalpa**, **Elephant Ear Tree**, **Catawba** and **Cigar Tree**. If you can't afford orchids for that special someone, plant a Catalpa and you'll be swimming in orchid-like flowers early every summer. With its form, foliage and flowers, this tree looks great on the street and in the yard. Fast-growing coarse habit with a somewhat narrow open irregular crown and thick interesting undulant branches. Dense foliage of huge "elephant ear" heart-shaped leaves provides excellent shade. Covered in early summer with clusters of orchid-like ruffled incredibly fragrant jasmine-scented white blossoms each dotted with purple and spotted with rich buttery yellow radiating from the throat. Fruits are long bean-like "cigar" pods. Prefers deep moist fertile soil, but thrives in almost any conditions and soils, sun or partial shade. Grows rapidly. Remains dormant late into spring. Native to central U.S. Z4. (1½-3' transplants)



4030 Northern Catalpa, $13.00

***Cladrastis kentukea* American Yellowwood** 40-50' x same, sometimes much larger. Also called *C. lutea*. Open-formed magnificent flowering tree with a dense canopy, capable of attaining tremendous size. There's one at the Mount Auburn Cemetery with an amazing 110' spread. Its three main trunks are gigantic. Masses of intensely fragrant white hanging wisteria-like racemes bloom in spring and attract every bee in the neighborhood. Smooth grey beech-like bark. Alternate odd-pinnately compound yellow-green foliage turns golden-yellow in fall. Flat brown seed pods in September and October. And, of course, yellow lumber. Well-drained soils, pH adaptable. Tolerates harsh exposed sites. Full sun or partial shade. No disease. Native to eastern U.S. Z4. **ME Grown.** (8-10")

4053 American Yellowwood, $13.00



***Ginkgo biloba* Ginkgo** 50-80' Also called **Maidenhair Tree**. Considered the oldest living genus of seed plants; grew in North America in the time of the dinosaurs. Upright when young with branches that spike out and up like the rays of the sun, eventually becoming wide-spreading and graceful. Slow-growing, can be extremely long-lived. Unique fan-shaped foliage turns sparkling golden-yellow in fall, then all at once the leaves drop and within hours the tree is bare. Famous for their edible seeds and the infamous stinky fruit that encloses them. The flesh will actually rot off all on its own, leaving clean edible nuts with no bad smell. The softish nuts can be used in stir-fries. Leaf tea used to enhance circulation to the brain and extremities. Tolerates smoke, dust, wind, ice, insects, disease, salt. Prefers moist sandy neutral soils but is very adaptable. Minimal maintenance requirements, nearly indestructible, an excellent city tree. There are 3000-year-old specimens in China. Male and female tree required for fruit. These are unsexed seedlings. Native to southeastern China. Z3. **ME Grown.**(2-3')

4090 Ginkgo, $13.00

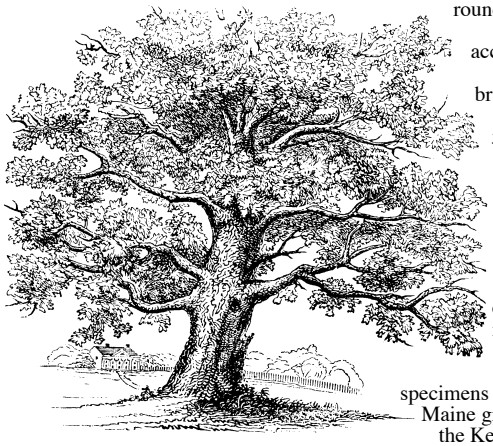
***Gymnocladus dioica* Kentucky Coffeetree** 50x50' Upright open-spreading specimen tree ideal for lawns or other spots that beg for a light yet equal distribution of shade. Grass will grow right up to the trunk, making it ideal for the yard. Stout branches and deeply furrowed bark. Beautiful winter profile. Leafs out very late in spring. Blue-green bipinnately compound foliage hangs in perfect layers creating a beautiful visual patterned effect. 12–18" fragrant greenish-white flower panicles on the female trees, 3" panicles on the male. Attractive to bees. 3–8" seed pods on females. Early European settlers roasted, ground and boiled the seeds to produce a coffee substitute. Grows fast when young, slowing as the tree matures. Prefers deep moist soils but is adaptable to many conditions including alkaline soils, salt, cities, streets and drought. Disease free. Requires full sun. These are unsexed seedlings. Plant at least a pair if you're intent on kicking coffee. Native to the eastern U.S. Z3/4. (1-3' transplants)

4097 Kentucky Coffeetree, $14.00

Prunus maackii **Amur Chokecherry** 20-40' x same. Extremely hardy medium-sized spreading rounded tree with year-round interest. White flowers in 2–3" long racemes in mid-spring. Spectacular dazzling bark makes the whole tree sparkle, varying in color from golden brown to dark red with glistening metallic flakes that exfoliate like birch when the tree is young. The color reminds me of an enormous golden Chinese buddha. Rich deep olive-green ovate foliage. Red-black 1/4" berries in midsummer, relished by birds and also suitable for jelly, juice and wine. Prefers well-drained soil. Native to the Amur region of eastern Russia. Z2. **ME Grown.** (4-5')

4135 Amur Chokecherry, $14.00

Quercus alba **White Oak** 60-80' x same. Broad spectacular irregularly rounded oak dominates the landscape and has accumulated centuries of folklore. The lowest branches will stretch out horizontally as far as 50 feet from the trunk. One of the most beautiful specimens I know is in Bedford, NY. Carved into a rock near the tree: "The Bedford Oak. Dates back to the 15th century." Stop and see it if you can; it's just a few miles off I-684. Some extremely fine specimens closer to home here in Maine grow on Swan Island in the Kennebec River right off Richmond. Bark is finely grooved and etched. The bark tea makes an effective astringent. Wood is valued for lumber and firewood. Edible acorns attract a diversity of wildlife. Once common along the Maine coast, it was almost entirely stripped for boat-building lumber over a century ago. Soil adaptable though it prefers deep moist well-drained acid conditions. Thrives in locations where leaves can be left at base; avoid soil compaction, even foot traffic. Disease- and insect-resistant, drought tolerant. Slow growing and extremely long-lived. Native to eastern U.S. Z3. **ME Grown.** (2-4' transplants)

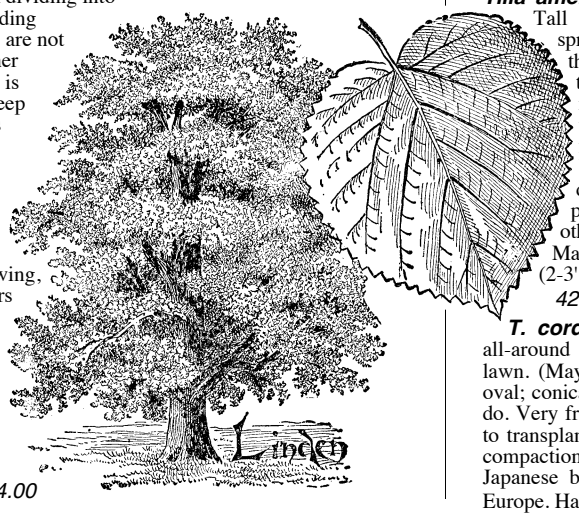


4145 White Oak, $16.00

Q. bicolor **Swamp White Oak** or **Bicolor Oak** 50-60' x same. A massive rounded shade tree with a short deeply ridged trunk and a fan of branches, the uppermost ascending and the lower drooping. The contrast between the light grey bark and the dark trunk fissures is particularly striking. Called Swamp White in recognition of its affinity for the wild low wetlands that once peppered eastern North America before the days of the parking lot and the big box. Called Bicolor because its large thick leathery lobed leaves have a glossy dark green upper surface and a white to greyish-green hairy felty underside. Its large 1 1/2" sweet acorns are highly attractive to wildlife, particularly waterfowl, sapsuckers and (ugh) squirrels. Its yellow to reddish-purple fall foliage persists until spring. Prefers moist, acid soils where drainage is poor, but exhibits excellent drought resistance as well. Very fast growing once established. Native to northeastern U.S. Z3. **ME Grown.** (24-30" transplants)

4150 Swamp White Oak, $14.00

Q. rubra **Red Oak** 60-80' Also called **Northern Red Oak**. The most common oak in northern New England and a common tree in central Maine. Typically a single large trunk dividing into several large ascending spreading branches. While the branches are not as massive as some of the other oaks, its open rounded crown is magnificent. The trunk is a deep grey textured web of surfaces overlaid one upon another. Sharply toothed foliage turns orange-tan during apple season. The 1" acorns feed the native population and sprout with ease more or less wherever they land. Fast growing, up to two feet per year. Prefers well-drained sandy slightly acid soils. Those on my farm thrive in the shallow ledgey ground. Tolerates shade, compacted soil, salt, pollution and other urban conditions. Eastern U.S. Z4. (1-5')



4170 Red Oak, $14.00

Salix **spp. Cape Rosier Basket Willow** 50' more or less. If you're looking to make a basket, a bowl or maybe a boat, this could be the only material you need. Beautiful subtly golden-colored basket willow propagated from the old Nearing Homestead on Cape Rosier, ME. Their trees are pollarded, a European pruning technique of severely cutting back the main branches to enhance the formation of long whips for basket-making. This enables easy annual spring harvesting and controls the size of the tree. In time, the trees develop a gnarly head which has great character. Stanley Joseph, homesteader on Cape Rosier and neighbor of the Nearings, used this willow for many years to make everything from baskets to the traditional Irish boat, the coracle. Nearly 30 years ago, with Stanley's encouragement, I first planted basket willows on our farm in Palermo. Prefers sun and moist soils. Z4. **ME Grown.** (3-4')

4190 Cape Rosier Willow, $17.00

S. alba **'Britzensis' Coral Bark Willow** 15-30' x 12-15' Späth intro, Britz, Germany, 1878. Also called ***S. a.*** var. ***vitellina*** **'Britzensis'**. Fast-growing shrubby tree with highly ornamental "coral" red bark. Recommended for filling the winter flower vase. No water: just set the dormant branches in the vase and enjoy. The deep red stems will dry to a rusty red. Because the color is most striking on new growth, give it an annual spring pruning. Especially beautiful in the snowy winter landscape. Typically narrow *Salix* leaves. Originally raised from seed by the famous nurseryman Ludwig Späth whose lilac (**#5840**) is one of *the* all-time favorites. Likes water, adaptable to a wide range of soils and conditions. Full sun to light shade. Z2. **ME Grown.** (1 1/2-3')

4191 Coral Bark Willow, $10.00

S. a. **'Tristis' Niobe Weeping Willow** 50x50' The classic weeping willow, a very large majestic graceful wide-spreading tree. Golden drooping branches can hang to the ground. Branches used for basket weaving; golden bark and leaves used medicinally. Not to be confused with the Whomping Willow of Hogwarts—branches sway freely in the breeze but are unlikely to attack, though roots have been known to disrupt plumbing. Easily transplanted and fast growing. Prefers sun and moist soils. Native to southern Europe and western Asia. Z4. (2 1/2-5')

4195 Niobe Weeping Willow, $10.00

S. matsudana **'Snake' WIllow** 30-50' A fast-growing wide oval tree with distinctively curled wiggled and twisted branches. The twigs look like sine waves—or maybe the stock market. Even the foliage loops and curls. 'Snake' is a selection of the standard contorted 'Tortuosa' willow with an even more wildly branching habit. Interesting outside in the yard and beautiful in a wreath or a vase. Quite nice as a young specimen. Keep it pruned and keep it small if you like. Drought tolerant though, like the other willows, thrives in moist locations. Native to Argentina. Generally considered a Zone 5 plant though you might find it does well in parts of Zone 4. **ME Grown.** (4-5')

4200 Snake Willow, $10.00

Stewartia pseudocamellia **Japanese Stewartia** 30-40' x 20-30' Small to medium-sized tree with beautiful bark and showy white camellia-like flowers for 3–4 weeks in July and August when few trees are in bloom. Distinctive and decorative year-round. Multi-trunked pyramidal-oval form needs no pruning. Dirr calls it "possibly the best tree for the garden." Foliage opens bronze-purple in spring, turns dark green in summer, then bright colors in fall: yellow, orange, red, reddish-purple. Smooth muscle-textured exfoliating bark peels off in strips to show contrasting colors—grey, orange and reddish brown—below. Best in moist acid soil (pH 4.5–6.5) high in organic matter. Does not tolerate drought or excessive moisture. Can be difficult to establish, but needs little care thereafter.☐Native to Japan. Z5. **ME Grown.** (14-20")

4202 Japanese Stewartia, $14.00

Tilia americana **American Linden** 60-80' Also known as **Basswood**. Tall stately tree with rounded crown and numerous low-hung spreading branches. Good for attracting bees no matter how remote the location. Sweetly fragrant yellow June flowers reputed to make the best honey, also a popular after-dinner tea and stomach remedy. I consider it the best soft carving wood. Inner bark, tough and fibrous, is used for ropes and nets. Young fruit and flowers can be ground into a paste as a chocolate substitute. Yellow fall color. Likes deep rich moist soils, but will grow in dry heavier soils. Full sun or partial shade. Sensitive to salt and pollution. Tolerates alkaline soil. Subject to Japanese beetles and other insect damage, though control measures are seldom needed. May live to 900 years. Native from New Brunswick to Virginia. Z3. (2-3' transplants)

4205 American Linden, $13.00

T. cordata **Littleleaf Linden** 60-70' x 30-45' Absolutely excellent all-around shade tree for the yard, office, mall, or even the White House lawn. (Maybe Michelle will plant several!) Medium-fast growing, upright oval; conical when young. You can shear it into a hedge as some in Europe do. Very fragrant yellowish flowers attract bees. Heart-shaped foliage. Easy to transplant. Prefers moist deep fertile soil and full sun, but adapts to pH, compaction and shade. Somewhat sensitive to drought and salt. Subject to Japanese beetle, though control measures are seldom needed. Native of Europe. Hardy in all of Maine. Z3. (24-30")

4207 Littleleaf Linden, $13.00

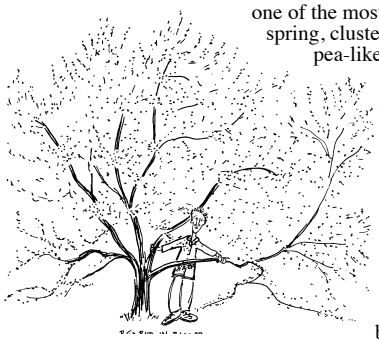
Ornamental Trees

Although some of these smaller trees are large enough to provide shade and others provide excellent wildlife habitat, their chief attribute tends to be their beauty. Some have spectacular blooms while others have amazing foliage, fragrance, bark, branch structure or overall appearance. All deserve to be planted more often.

Acer pensylvanicum **Striped Maple** 20x20' Also called **Moosewood Maple**. Wonderful small understory tree is a common sight in the Maine woods. Very large maple-shaped leaves open pink and then soon turn light green. Called 'Striped' because of the instantly recognizable green and white striped bark. Called 'Moosewood' as it's one of the preferred browses of Maine's largest mammal. With lower teeth extended, they dig into a young tender trunk. Then with a quick tug, off comes a long strip of delicious bark. And the huge leaves are like lettuce right out of the garden. Somehow the trees do survive and, as they mature, the bark turns a deep reddish color, though even in older trees the younger stems retain that beautiful green and white. Showy light yellow fall color. Prefers slightly acidic moist woodsy soil and partial shade. Native eastern U.S. and Canada. Z3. **ME Grown.** (2-3')

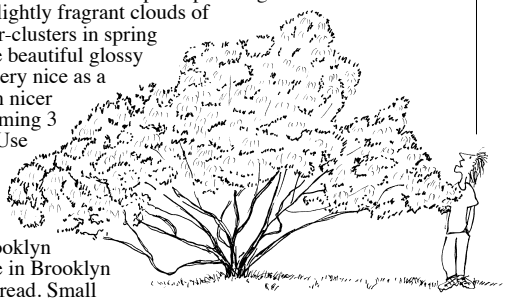
4230 Striped Maple, $13.00

Cercis canadensis **Redbud** 25-30' Small irregularly vase-shaped tree is one of the most wonderful ornamentals. In early spring, clusters of small brilliant purplish-pink pea-like flowers are so abundant they fill the entire tree; they dot the graceful branches and even come right out of the trunk. Truly an astonishing sight. Very large, up to 7", heart-shaped leaves emerge a beautiful opaque pink, gradually mature to deep green and turn bright yellow in fall. 2–3" flat leguminous pods. Excellent honey plant. Some literature suggests that redbuds might be hardy in cold climates but still fail to bloom. If you have experience with redbuds in northern areas, please let us know. We are looking for trees with ironclad dependable bloom. Sun or partial shade, soil adaptable. Fine as a specimen tree or in groups. Needs sweating before planting to break dormancy, instructions on page 4. Native to central and eastern U.S. Z4. (18"-3')



4240 Redbud, $18.00

Chionanthus virginicus **White Fringetree** 15-30' x 30' Large multi-stemmed shrub or small tree with an open spreading rounded form. So completely covered with lightly fragrant clouds of feathery lacy white flower-clusters in spring that you can hardy see the beautiful glossy rich dark green foliage. Very nice as a small young tree and even nicer with age. Will begin blooming 3 or 4 years after planting. Use as a specimen, in groups, borders, near buildings. There are some amazing old trees at Mount Auburn cemetery and Brooklyn Botanic Gardens. The one in Brooklyn has a nearly thirty-foot spread. Small bluish-black fruit sought by birds. Adaptable, but prefers moist fertile acid soil. Tolerates air pollution; does well in cities. Native of eastern U.S. Z3. **ME Grown.** (24-30")



4245 Fringetree, $16.00

Cornus alternifolia **Pagoda Dogwood** 20' x 30-35' Also known as **Alternate-Leaved Dogwood**. Small tree or large multi-stemmed shrub, particularly beautiful for its tiers of horizontal branches and their distinct sympodial (consecutive "Y"s) branching habit right down to the smallest twigs. Extremely fragrant white 2-3" flower clusters in mid-late spring, followed by immature olive-green berries, each tipped with a tiny bright yellow style remnant. In midsummer clusters of dark blue berries ripen above the blue-green foliage. One of the most popular dogwoods with the birds. Prefers partial shade and moist well-drained acid soil, but tolerates full sun, poor soil and even clay. pH adaptable. Excellent naturalized as a specimen or in groups and often found growing with sugar maple, beech and basswood. Reddish-purple fall color. Native to eastern U.S. Z3. **ME Grown.** (9-32" transplants)

4255 Pagoda Dogwood, $12.00

Hamamelis virginiana **Witch Hazel** 20-30' A small tree or large shrub of irregular rounded form and interesting crooked branches. Yellow 1/2" flowers with a unique fresh fragrance appear in the fall. Oval wavy-edged foliage opens ruddy red, matures to a matte green and then climaxes a brilliant golden-yellow. Witch hazel extract, from leaves, young bark and roots, has astringent and antiseptic uses. Said to be the preferred wood of dowsers. Full sun or shade. Prefers moist acid soils; avoid dry spots. No pests or diseases, does well with very little care. Native Canada to Georgia. Z3. **ME Grown.** (9-30" transplants)

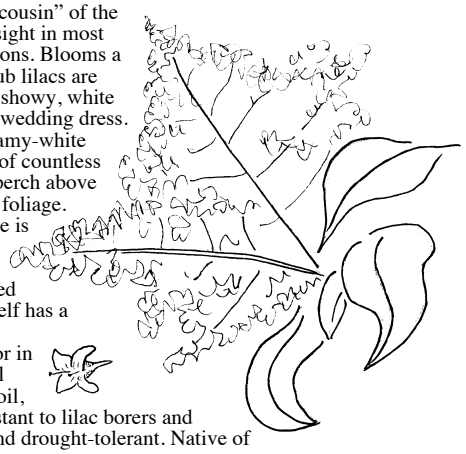
4332 Witch Hazel, $13.00

Heptacodium miconioides **Seven-son Flower** 10-20' x 8-10'. Arnold Arboretum, 1980. Small showy layered multi-stemmed tree or large shrub with panicles of sweetly fragrant small white flowers in late summer when no other trees are in bloom. Bees love it. Over time, the flower sepals turn pink and persist, contrasting with the green foliage. The foliage, reminiscent of peach leaves, is quite distinctive: long, pointed, curved and folded, hanging in clusters. Attractive exfoliating bark. In 1907 EH Wilson, plant exploring in the Chinese province of Hubei, was the first westerner to note the tree. Over 70 years later, seeds were finally brought back to Boston and it has since become increasingly popular throughout the country. (There's an extremely nice specimen up on the terrace at Tower Hill Botanic Garden in Massachusetts.) Full sun to partial shade. Slightly acid moist well-drained soil though adapted to wet clay and dry conditions. Native to China. Z4/5. **ME Grown.** (8-10")

4341 Seven-son Flower, $14.00

Malus **Crabapples** *4575-4797* on pages 35-36.

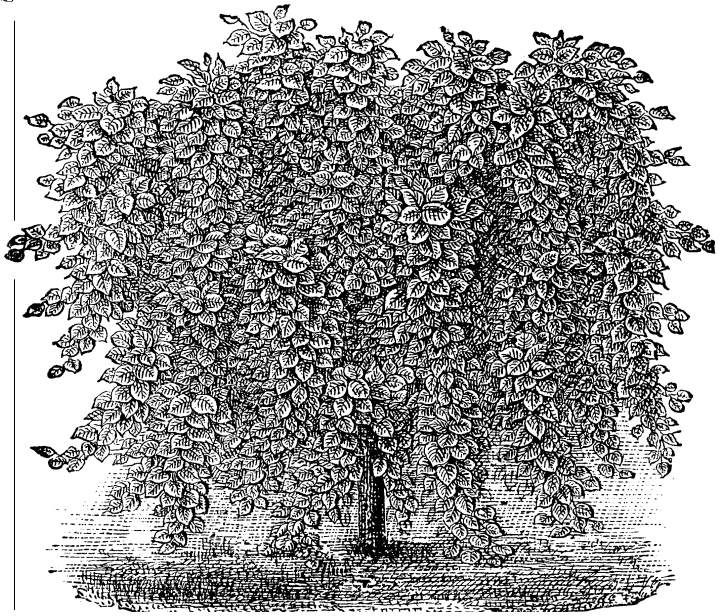
Syringa reticulata **Japanese Tree Lilac** 20-30' x 15-25' Small rounded irregular flowering tree "cousin" of the shrub lilacs. A common sight in most Maine towns for generations. Blooms a good month after the shrub lilacs are gone by. Vibrant, bright, showy, white as an old-fashioned June wedding dress. Large lacy triangular creamy-white panicles—each made up of countless tiny 4-petaled flowers—perch above the canopy of dark green foliage. Their wonderful fragrance is reminiscent of almond extract. Reddish brown cherry-like bark is grooved and checked. The tree itself has a rounded irregular habit. Beautiful as a specimen or in groups. Full sun to partial shade and well-drained soil, with a pH of 6.5–8. Resistant to lilac borers and powdery mildew. Salt- and drought-tolerant. Native of Japan. See page 44 for other lilacs. Z3. **ME Grown.** (24-48")



4912 Japanese Tree Lilac, $15.00

Ulmus glabra **'Camperdownii' Camperdown Elm** 15x30' Discovered in 1640 in Dundee, Scotland, by the Earl of Camperdown who recognized its unique and wonderful shape, and grafted it onto a Scotch or Wych elm (*U. glabra*). All the Camperdown elms in the world come from that original tree. Low-growing mounded very wide-spreading weeping form. Somewhat contorted branches laden with thick dark green summer foliage hang to the ground, creating a protected "room" which looks quite dense from the outside, but is completely open on the inside—plenty of space for a table and chairs. To establish a weeping habit at the height you desire, follow instructions on page 36 for weeping crab. The leaves, much larger than the familiar American elm's, turn yellow in autumn. Many older specimens of this amazing tree are thriving around the state, including those by the Camden amphitheater and two next to the Maine State Capitol's entryway, overlooking the Kennebec River. Not susceptible to Dutch elm disease. Prefers well-drained moist fertile soils. Z4/5. **ME Grown.** (2-4')

4923 Camperdown Elm, $40.00



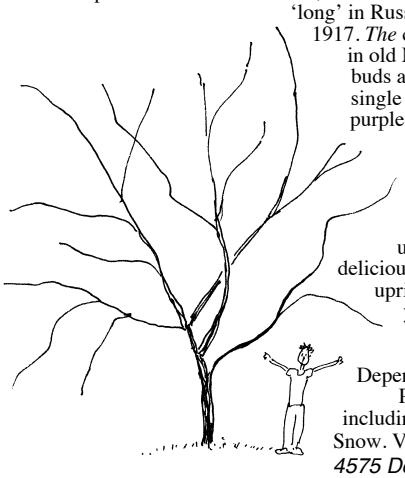
Malus Flowering and Culinary Crabapples

Crabapples have a wonderful presence in the yard. We avoid the typical garish big-box offerings in favor of interesting and little-known varieties. We constantly look out for the best small to medium-sized trees with four-season interest: magnificent spring blooms, clean vibrant summer foliage, showy fall and winter fruit, and eye-catching shapes and branching habits year-round. Some produce masses of persistent fruit that will attract birds all winter and into spring; others produce fruit for the jelly jar or no fruit at all. I limit pruning to a touch-up here and there, allowing each to express its unique identity.

A crabapple is an apple with fruit smaller than 2" in diameter. Of the 24 recognized species of apples, most are considered to be crabs. My own love of crabapples stems (pardon the pun) largely from visits to the excellent collections in the Arnold Arboretum in Boston and the Lyle Littlefield Gardens in Orono. The Arnold has one of the most extensive collections in the world. The best book is John Fiala's definitive text, *Flowering Crabapples: The Genus Malus*.

Most crabapples bloom annually in May just before the lilacs and make excellent pollinators for any apple. (3½-6' trees)

Dolgo 25x30' From seed collected by NE Hansen of *M.* x *robusta* in 1897 at the Imperial Botanical Gardens, St. Petersburg, Russia. (*Dolgo* means 'long' in Russian.) Introduced in the U.S. in 1917. *The* classic culinary crab still found in old Maine backyards. Apricot-pink buds and large fragrant 2" pure white single flowers bloom early. Beautiful purple-red 1½" teardrop-shaped fruit makes flavorful clear ruby-red jelly. In recent years the aromatic very sweet, very acidic fruit has found favor with hard cider makers. Also useful for canning, pickling and delicious sauce. Vigorous large blocky upright spreading tree consistently yields abundant summer crops. Lower branches will drape to the ground if left unpruned. Dependable pollinator for all apples. Parent of many named varieties including Centennial, Kerr and Spring Snow. Very hardy. Z2. **ME Grown.**

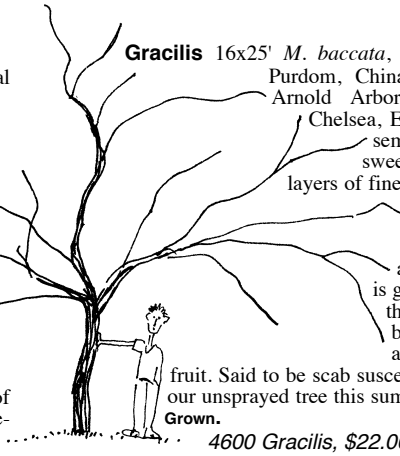


4575 Dolgo, $22.00

Donald Wyman 20x30' Chance seedling. Arnold Arboretum, 1970. If I could plant only one crab, I would plant a Donald Wyman. Deep pink buds and large 2" single white flowers early in the season. The bloom is so intense, the tree looks like one massive flower. Beautiful rounded wide-spreading medium-sized tree with attractive glossy green foliage. Looks great when it has room to spread out. The shape alone is enough to recommend this cultivar. The bright ⅜" red oval fruit completely covers the tree in clusters and persists until spring when the birds clean it off in time for the next bloom. 2001 winner of the Carey Award for Distinctive Plants for New England. Named in honor of America's great horticulturist. Disease-free, although said to be slightly susceptible to powdery mildew. Z4. **ME Grown.**

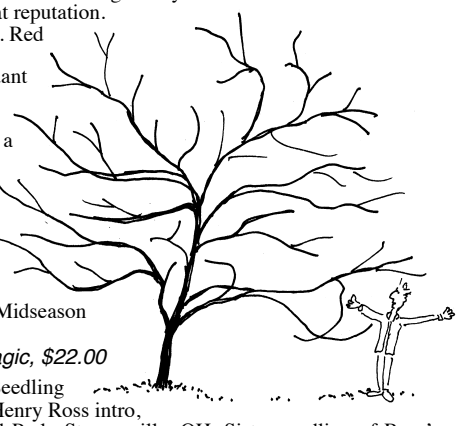
4579 Donald Wyman, $22.00

Gracilis 16x25' *M. baccata*, Seed No. 329, collected by William Purdom, China, 1910. Plants subsequently sent to Arnold Arboretum by James Veitch and Sons, Chelsea, England, 1913. Medium-sized mounded semi-weeping form. Long branches gently sweep the grass as well as the sky. In spring, layers of fine luminescent-green foliage appear to be covered with 10,000 snowdrops or lilies of the valley. That's Gracilis in bud stage. Although the buds are actually faint pink, the overall effect is green and muted white. In full bloom the thousands of very small single white blossoms give the tree a lacy ethereal aura. Uniquely beautiful crab with tiny fruit. Said to be scab susceptible, but there's not a spot of scab on our unsprayed tree this summer after two months of rain. Z3/4. **ME Grown.**



4600 Gracilis, $22.00

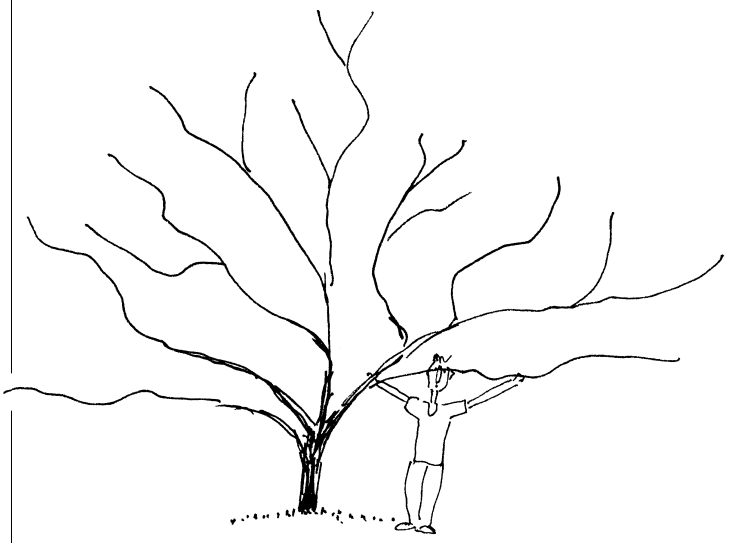
Indian Magic 15x15' Robert Simpson introduction, Vincennes, IN. One of the best of the the pinks, an outstanding showy ornamental tree. Well known with a well-deserved great reputation. Beautiful in every season. Red buds open to single deep rose-pink flowers. Abundant attractive small elliptical bright glossy red long-stemmed fruits with a slight orange blush turn orange in late fall and persist all winter, attracting birds. Dark green foliage turns brilliant orange in fall. Rounded open form. Rarely affected by scab. Midseason bloom. Z4. **ME Grown.**



4628 Indian Magic, $22.00

Kaleidoscope 16x16' Seedling of van Eseltine. GV 22. Henry Ross intro, Gardenview Horticultural Park, Strongsville, OH. Sister seedling of Ross's Double Red. Flowers are very similar. Henry wrote to me, "The flowers appear mostly in huge panicles at the ends of the branches." A kaleidoscope of dark pink, light pink and white blossoms all share the tree simultaneously. The name—suggested by Campbell Watts of Concord, MA—was adopted by Mr. Ross in 2003. A Fedco exclusive. Attractive dark red ½" fruit. Probably hardy to Zone 3 or 4. **ME Grown.**

4638 Kaleidoscope, $22.00

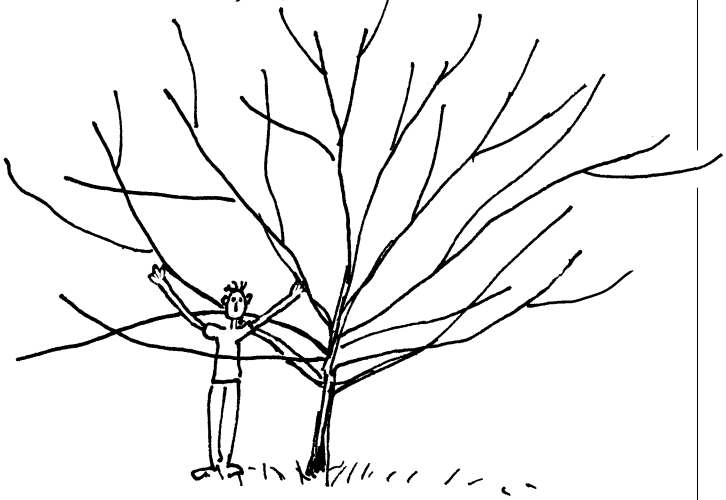


Kerr 20x24' (Morden 352) Dolgo x Haralson. Morden, Manitoba, Canada, 1938. Introduced by the famous Canadian plant breeder WL Kerr. Large-fruited crab with a multitude of uses. Heavy annual bloom of single white flowers followed in late summer by firm deep red ovate Dolgo-shaped fruit that bend the branches like plums. If heavily thinned, the fruit can approach 2" in diameter, but 1½" is more typical. Very decent eating off the tree, better after storage. Also a very good culinary crab. We made a Kerr brandy that was exceedingly tasty and not at all too sweet. Keeps well. Extremely productive and precocious, somewhat spreading vigorous medium-sized tree. Exceedingly hardy. Z3 or maybe even 2. **ME Grown.**

4645 Kerr, $22.00

Niedzwetzkyana 25x25' *M. pumila* Discovered by NE Hansen in Kazakhstan, 1896 or possibly by George Dieck in Siberia, 1891. One of the most historically important of all crabapples. Considered to be *the* original source for all red-fleshed apples. Descendents include Hopa, Makamik, Redfield, Lemoine, Liset, Red Splendor and all the rest of the "Rosyblooms." Red flowers, reddish foliage and medium-large 2" pink/red-fleshed fruit. Skin is splashed and striped dark red, with a small russet area about the stem and pinpoint white dots scattered on the surface. Small round furrowed shallow basin. The flesh is not quite solid pink. A very narrow whitish area just under the skin fades to dark pink and back to off-white on either side of the cavity. Probably too tart for fresh eating but certainly OK for adding to cider, pies or sauce. Fiala says that Niedzwetzkyana and Almata may be identical, but I think not. Although I have not seen them side by side, I have seen both. For a decent attempt to sort it all out, see Fiala's book, *Flowering Crabapples*. Scab prone. Z3 or 4. **ME Grown.**

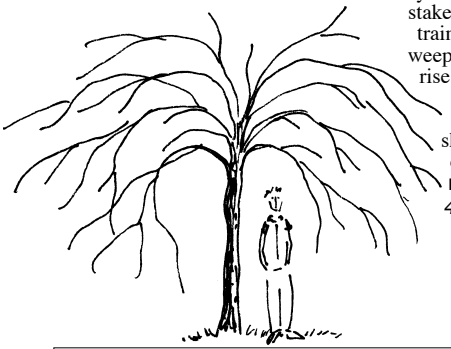
4691 Niedzwetzkyana, $22.00



Prairie Rose 15x15' OPS 825, open-pollinated selection of the native prairie crabapple, *M. ioensis*. Univ of Illinois, c. 1959. A spectacle in bloom for both its visuals and its aromatics. Pink buds followed by 2" light pink flowers, each with 25+ petals. Very strong—delightfully odd—intoxicating fragrance. More like a gigantic rose bush than an apple tree. Better than Brandywine if you can believe it. The only specimen I know is on Mark and Paula Fulford's farm in Monroe, ME, where it flowers long after crabapple season when nothing else is in bloom except Prince Georges. Narrow green cut-leaf foliage. No fruit really; Mark calls them "small brown bullets." Z4. **ME Grown.**

4731 Prairie Rose, $22.00

Red Jade 12-15' x 15-20' Chance seedling of *M. floribunda* 'Exzellenz Thiel', Brooklyn Botanic Garden, NY, 1953. I never liked weeping trees until I saw my first Red Jade. It's magnificent, dense and finely branched. The spring combination of yellow-green foliage, pink buds and single white (actually faint pink) blossoms has a magical, almost surreal quality. Changes day after day as more buds open and the greens and pinks merge and soften to white. Beautifully covered with small 3/8" long-stemmed light red—not pink—fruit, born in clusters up to 5 per bunch and popular with birds. Glossy vibrant green foliage. Using long stakes and judicious pruning, I have trained my 8-year-old tree to begin weeping at 7'. The arching branches rise to 10' and hang to 5' above the grass. The spread is about 12'. Within the next few years it should reach a spread of 20' and drape nearly to the ground. Z4. **ME Grown.**



4754 Red Jade, $22.00

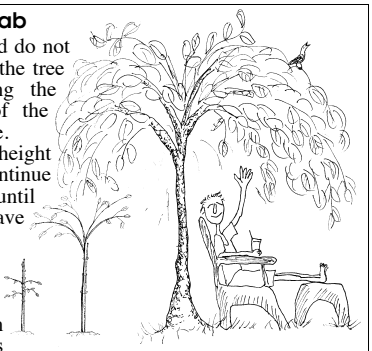
ME Grown = grown in Maine by a member of the Fedco growers coop

Crabapples are really just apples in disguise. They prefer full sun and deep well-drained soils of 5.5–6.5 pH but they are quite forgiving and will thrive in many locations with a little TLC. They don't like to be drowned or starved for water, and they do need to be protected from borers, mice and deer. See page 6. Planting instructions on page 5.

Pruning Crabapples

Most crabapples require little or no pruning except when a branch is broken or you feel compelled to shape your tree in one way or another. Allow each tree to assume its own unique form. Weeping crabs however do require pruning and training: see sidebar above right for guidance.

Training Your Weeping Crab



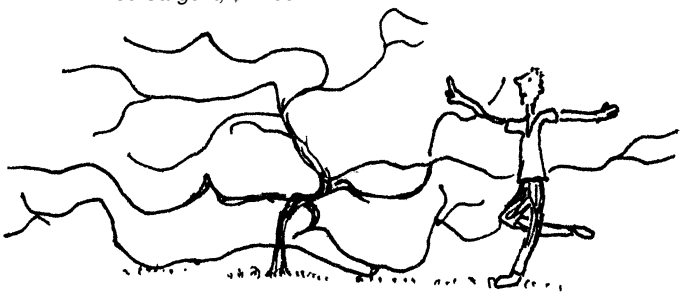
First summer: Stake the tree and do not prune at all. Staking keeps the the tree from weeping before reaching the desired height. Tie the tip of the central leader snugly to the stake.

Second summer: Decide the height you want weeping to begin. Continue to train the leader to the stake until it reaches the desired height. Leave some, but not all, of the lower branches.

Later years: Once the leader reaches the desired height, let several branches form and begin to weep. (The nicest weepers I've seen begin weeping at about 6–8' high.) Over 2–3 years, remove all the lower branches. Eventually remove the stake. Continue to remove lower branches as necessary.

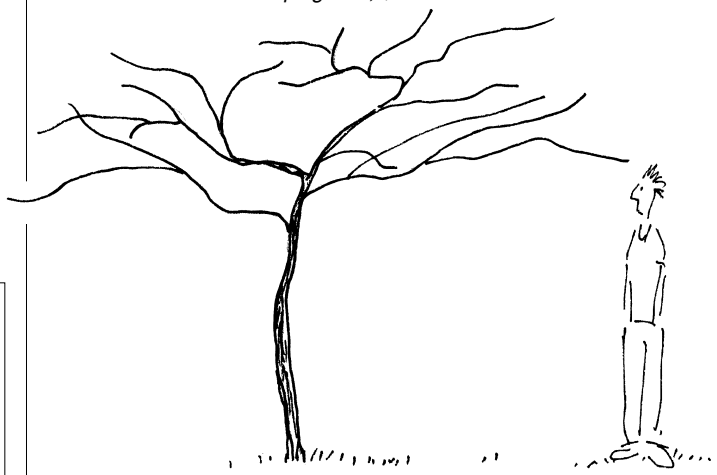
Sargent 8x15' (*M. sargentii* var. 'Grant's Five and Dime') Arnold Arboretum, 1892. Originally brought to the U.S. from Japan by one of America's most famous horticulturists, CS Sargent. The smallest crab species, densely and horizontally branched from the base with no tendency to develop a central leader. The branches curve and twist and turn like a large pretzel. Pink buds and profuse pure-white fragrant single flowers seem to bloom forever. Birds are crazy about its mass of very small dark red-purple persistent fruit. Plant this crab by your winter birdwatching window. Often propagated by seed, so many strains exist. This strain, which Phyllis Jantos originally bought nearly half a century ago for $1.50 at Grant's Five and Dime, blooms annually, unusual for a Sargent. Dark green foliage. Disease resistant. Z4. **ME Grown.**

4780 Sargent, $22.00



Semi-weeping Red 10-12' x 20' Unknown parentage and origin. Doesn't weep but rather it snakes and crawls and reaches out across the yard, the undulating branches barely rising above a horizontal plane. Even at 10 years old, our tree is only about 7' tall. I pass it en route to the barn—often a dozen times a day—and every time, I marvel at its shape and its color. Just as beautiful in January as in June. Deep rich glowing electric-red foliage emerges just before the plums bloom in mid-May. The half-open dark red buds dangle in clusters below the leaves like the decorative fringe on the rim of a holiday sombrero. The fruit is red, the leaf petioles are red, the whole tree is red. Roger Luce discovered it many years ago in a nursery near Bath, ME. Unfortunately he lost the tag. He just called it "Semi-weeping Red". I've tried to track down its identity but with no luck. Roger thought it may have never caught on because the foliage is nearly as red as the blossoms, making it difficult to distinguish one from the other. That has never bothered me. Very small insignificant fruit. Z4. **ME Grown.**

4797 Semi-weeping Red, $22.00



Woody Ornamental Shrubs

Although many of these shrubs are multi-use plants, all are cultivated primarily for their flowers, fragrance, foliage or interesting form. They range from diminutive and delicate to large and breathtaking. Some are old standards and some are relatively unknown. We plant them to reduce the amount of lawn we feel compelled to mow, while increasing the beauty and wildlife cover that surrounds us. It's great to see our edible landscape growing and sequestering more carbon every year!

Abelia mosanensis **Fragrant Abelia** 4-6' x same. Delicate showy exceedingly fragrant pink campanulate (bell-shaped tubular) white-centered flowers. Somewhat loose plant with graceful arching stems. Best as a specimen or hedge planting. Blooms in late spring. As fragrant as hyacinth or even Korean spicebush. Glossy green foliage turns orange-red in fall. Full sun to partial shade. Easy to grow. Prune after flowering. Tolerates most average soils but prefers acid, moist and well-drained. Native to Korea. Z4. **ME Grown.** (8-10")

4927 Fragrant Abelia, $12.00

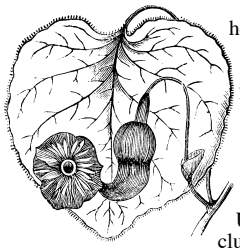
Aesculus parviflora **Bottlebrush Buckeye** 10-12' x 15' Irregular large wide multi-stemmed suckering shrub with beautiful horse chestnut-like foliage and jaw-dropping midsummer flowers. Forms absolutely magnificent multi-leveled colonies. Foliage is medium to dark green turning yellow-green in fall and always disease-free. In early summer thin green asparagus-like spears appear across the surface of the colony and then open up into spectacular 10–18" wispy feathery panicles that stand upright above the foliage in a mass. A major show-stopper in and out of bloom. You can grow it in the sun but it will thrive in the shade. Prefers well-drained acid soil. Native to southeastern U.S. Z4. **ME Grown.** (9-12" transplants)

4936 Bottlebrush Buckeye, $12.00

Arctostaphylos uva-ursi **Bearberry** Also called **Kinnikinick**, **Hog Cranberry**, **Mealberry**, **Sandberry**, **Mountain Box**, or **Bear's Grape**. Delicate low-growing and exceptionally beautiful glossy evergreen spreading groundcover. A magnificent plant for acid soils. One plant can spread to 15'. If you like native plants, you might visit Van Berkum Nursery in Deerfield, NH. They've got a beautiful display that features stone steps surrounded by *Arctostaphylos*. Small dainty beautiful pinkish-white flowers in spring. Small bright red drupe-type berries color up in late summer and persist into winter. Leaves are powerfully astringent and have many medicinal uses. Prefers poor sandy infertile acid soils, tolerates salt, but is difficult to transplant. Beware! Set plants 1–2' apart. No need ever to prune or fertilize. Sun or partial shade. Native to North America and Eurasia. Z2. (well-rooted transplants)

4945 Bearberry, $8.00

Aristolochia durior **Dutchman's Pipe** 20-30' Also called **Pipe Vine**.



Vigorous climber with large wonderful 4–10" heart-shaped dark green leaves. Once established, it will cover the porch or trellis or gazebo every summer. There's an amazing specimen on Route 2 between Norridgewock and Mercer that covers a porch, climbs up the front of the barn and then up the TV antenna another 6 or 8 feet, like a green foliated bowsprit fastened to the front of the red barn. Provides all the privacy you ever wanted even if you live right in town. Inconspicuous U-shaped tubular white and mahogany flowers in clusters of 1–3 look like "Dutchman's Pipes." Sun or shade. Thrives in shade. Likes well-drained soil with adequate moisture. Native to eastern U.S. Z4. (2yr #1)

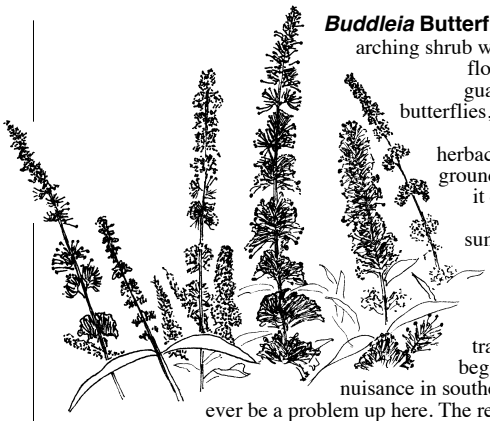
4954 Dutchman's Pipe, $12.00

Aronia arbutifolia **'Brilliantissima' Red Chokeberry** 6-10' x 3-5' In his book *Best of the Hardiest,* John Sabuco calls red chokeberry "one of our finest native landscape shrubs." Upright multi-stemmed form. Dense clusters of small but showy white flowers with red stamens. Dark green foliage turns a spectacular crimson in the fall. In huge demand as *the* best alternative to the invasive burning bush. Birds love the abundant persistent glossy bright red fruit. Spreads by suckers. Beautiful in masses, plantings and borders. Transplants easily. Adapted to many soils, wet or dry, but prefers moist and well-drained. Sun or partial shade. Can be trained into a small tree. Native to eastern U.S. Z4. **ME Grown.** (12-30" transplants)

4961 Red Chokeberry, $9.00

A. melanocarpa **Black Chokeberry** 4-6' x same. Compact rounded shrub suckers profusely to form colonies. Showy white blooms in late spring. Glossy green summer foliage turns brilliant wine-red in fall. The edible fruit has been receiving a fair amount of attention recently. Suggested for juice, wine, jelly, tarts, even pilaf. While barely palatable fresh, the flavor improves considerably when dried or cooked. Here's one juice receipe: simmer with sugar, press out the pulp, add water and lime juice. You get to improvise with amounts! Its sugar content, dark color and astringency contribute to its wine potential. Not particularly picky about where it grows. Adaptable to wet or dry areas, sun or partial shade. Free of diseases and insects. Like the Red Chokeberry, it's an excellent alternative to the highly invasive burning bush. Native to eastern U.S. Z3. **ME Grown.** (12-30" transplants)

4968 Black Chokeberry, $9.00



Buddleia **Butterfly Bush** Colorful attractive arching shrub with 4-6" panicles of fragrant flowers in midsummer that are guaranteed to attract zillions of butterflies, bees and hummingbirds. In New England treat it as an herbaceous perennial. Cut it to the ground in early spring—or just let it die back—and it will bloom again on new wood come summer. Reblooms throughout the summer if spent flowers are cut. Recommended for shrub or perennial borders. Grey-green foliage. Easy to transplant. Very adaptable but begs for full sun. Can become a nuisance in southern states, but that shouldn't ever be a problem up here. The renowned plantsman Michael Dirr is a big fan of buddleia. Usually considered to be a Zone 5 plant though it may do well in Zone 4. (16-20" well-rooted crowns)

B. **x 'Miss Ruby'** 4-5' x 3-4' 'White Ball' x 'Attraction' Dr. Dennis Werner intro, JC Raulston Arboretum, Raleigh, NC, 2009. Rich pink fragrant blooms from midsummer to fall. The first pink butterfly bush. Well-branched compact upright habit. The number-one–rated buddleia of 107 varieties in the Royal Horticulture Society trials. **ME Grown.**

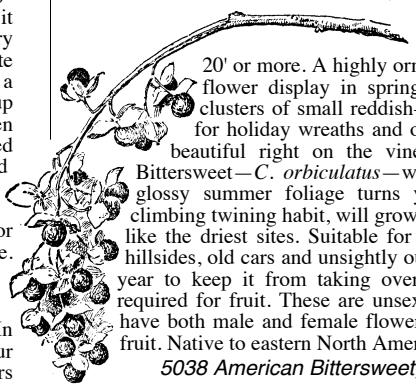
4997 Miss Ruby Butterfly Bush, $12.00

B. davidii **'Potter's Purple'** 6-8' x same. Large 8" purple lightly fragrant flower panicles. Lance-shaped dark green foliage with silvery underside. **ME Grown.**

5007 Potter's Purple Butterfly Bush, $12.00

Caragana arborescens **Siberian Peashrub** 15-20' Nitrogen-fixing cheerful bright green upright multi-stemmed oval shrub well-suited to wind-breaks, hedges and borders. Delicate yellow flowers in spring are followed by small seed pods that turn a golden yellow. The pods and the small "peas" are edible. Eaten raw, they taste like garden peas, though not as sweet. Makes an acceptable chicken feed. Silvery bark and compound foliage, each with 8-12 small obovate leaflets. Easy to grow; just put them in and let them go. Adaptable to poor soils, drought, salt. Full sun. Maintenance free. Occasionally rumored to be invasive, although ours have stayed put for 20 years and not spread by seed or root. Native to Siberia and Manchuria. Z2 **ME Grown.** (10-48" transplants)

5027 Siberian Peashrub, $9.00



Celastrus scandens **American Bittersweet** or **False Bittersweet** 20' or more. A highly ornamental native vine. The insignificant flower display in spring is followed by beautiful grape-like clusters of small reddish-orange to orange-yellow berries used for holiday wreaths and other dried flower arrangements. Also beautiful right on the vine. (This is *not* the invasive Asian Bittersweet—*C. orbiculatus*—which you should never grow!) Deep glossy summer foliage turns yellow-green in fall. Very vigorous climbing twining habit, will grow in nearly any soil although it does not like the driest sites. Suitable for covering porches, stone walls, rough hillsides, old cars and unsightly outbuildings. Prune it extensively every year to keep it from taking over. Prefers full sun. Male and female required for fruit. These are unsexed vines. Although some plants may have both male and female flowers, plant two or three plants to ensure fruit. Native to eastern North America. Z3. **ME Grown.** (1-yr well-rooted)

5038 American Bittersweet, $10.00

Cephalanthus occidentalis **Buttonbush** 6-10' x 8' Loose rounded branchy shrub with bright green foliage and masses of highly attractive unusual spherical fragrant white flowers. Suitable for the garden, the stream or pond, or even an old floating log. Don't be surprised if you come across buttonbush growing *in* the river next time you head out in the canoe. But this is no invasive plant. Flowers appear for 4-6 weeks in summer, a magnet for honey bees. They also make interesting dried flowers. The seeds (nutlets) make good fodder for the ducks in the fall. Prefers moist soils! Recommended for naturalizing. Native to eastern U.S., west to New Mexico. Z4. **ME Grown.** (1-3' transplants)

5049 Buttonbush, $10.00

Chamaedaphne calyculata **Leatherleaf** 1-4' tall. Low-growing native spreading wetland shrub forms dense thickets and thrives in bogs, swamps, and along the edges of lakes and streams. Small delicately scented white bell-shaped flowers in late spring. Small "leathery" fine-toothed dark green *evergreen* foliage. Small round hard reddish-brown persistent fruit provides browse for white-tailed deer, caribou, and moose as well as food, nesting and cover for grouse and mallards. Member of the Heath family. Needs sun and "wet feet"—lots and lots of moisture. Likes acid soil but not shade. Native across northern U.S. and Canada. Z3. **ME Grown.** (18-22")

5064 Leatherleaf, $14.00

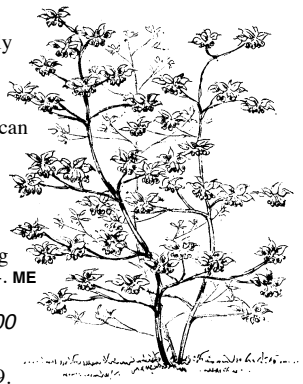
***Clethra alnifolia* 'Ruby Spice' Summersweet** or **Sweet Pepperbush** 4-5' x same. Sport of 'Pink Spires', Broken Arrow Nursery, Hamden, CT, 1992. A *New York Times* article called Clethra "a plant that sounds almost too good to be true." Red buds and beautiful spires of heavenly scented deep pink flowers appear on racemes for 6 weeks in midsummer. Bees and butterflies love it but rabbits and deer do not. Whorls of extremely attractive finely serrated distinctly veined dark green foliage turn deep gold in fall. Dangling racemes of "peppers" persist into the next growing season. Erect rounded-oval habit, often suckering to form dense colonies. Slow growing. Prefers acid moist well-drained soils. A good shrub to border streams and ponds. Will tolerate salty coastal conditions. Full sun to shade. Pest free and easy to grow. Native from Maine to Florida. Z3. **ME Grown.** (10-24")

5069 Ruby Spice Summersweet, $11.00

***Cotinus coggygria* 'Royal Purple' Smokebush** 8-10' x same. Boskoop, Netherlands. Upright spreading shrub with velvety dark purple foliage and amazing purplish-pink inflorescences that look like large smoke puffs on top of the branches throughout summer. Each one of these cotton candy-like poofs is composed of a web of fine stems, the smallest of which are lined with tiny hairs that reflect the light and create an ethereal effect. Quite remarkable. For maximum glow, plant where the sun will shine right through each luminescent leaf. Red-burgundy fall color. Often considered a Zone 5 plant, but reliably grows back and flowers each summer in Zone 4. Some say to cut it to the ground each fall for more vigorous and more brightly colored growth. I leave mine to come back on its own. So far it hasn't let me down. Adaptable to a wide range of pH and soils although it prefers it well-drained. Disease free. Native southern Europe to China. Z4. **ME Grown.** (9-12")

5116 Royal Purple Smokebush, $11.00

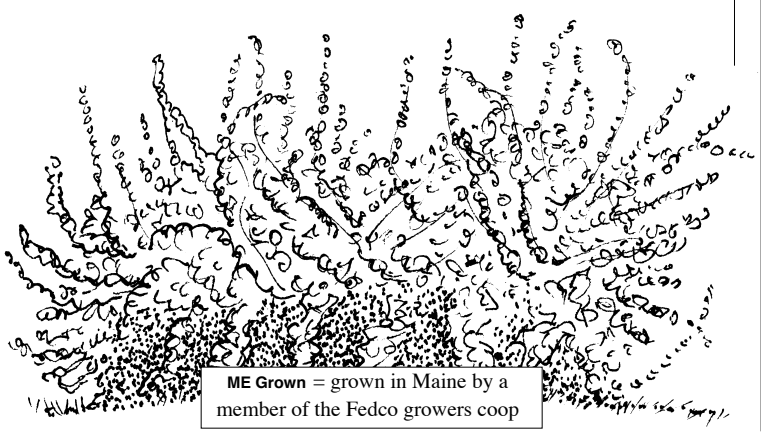
***Enkianthus campanulatus* Redvein Enkianthus** 6-12' x 4-6' Introduced 1870. Narrow shrub or small bushy tree with highly ornamental blooms. Dainty delicate pendulous bell-shaped creamy yellow or light orange flowers veined with red in mid-late spring. Be sure to plant where you can observe the incredible flowers up close. Bright to medium-green to blue-green foliage turns brilliant yellow to orange-red in fall. Tough plant once established. Acid sandy well-drained soil, medium moisture, full sun to partial shade. Requires no pruning at all. Slow growth rate. Native of Japan. Z4. **ME Grown.** (12-18")



5127 Redvein Enkianthus, $12.00

***Forsythia* x *ovata* 'Northern Gold' Forsythia** 6-8' x 5-7' Ottawa, Canada, 1979. If your forsythia blooms only from the snow-line down, you've been duped. Don't buy cheap big-box forsythia. Northern Gold has not only the outstanding bud hardiness necessary for flower production *above* the snow line, but also outstanding golden-yellow flowers. You can have a full bloom every year! Upright form with grey-yellow branches clad in healthy rich green foliage. Prefers moderately fertile, slightly acid to neutral soils with good drainage. One of the first flowers in spring. Bred from *F. ovata*, a hardy dependably blooming Korean species. Z3. **ME Grown.** (9-18")

5142 Northern Gold Forsythia, $12.00



ME Grown = grown in Maine by a member of the Fedco growers coop

Pruning Directions for Ornamental Shrubs, Trees and Berries

Proper pruning enhances the beauty and usefulness of flowering shrubs and trees. Trim shrubs for large blooms, fine foliage and good form.

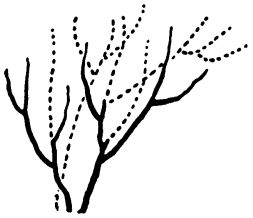
Why Pruning Is Necessary

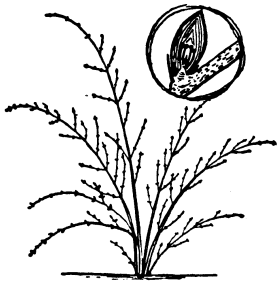
- Most shrubs need a few of the older canes cut off at the ground line each year to encourage the growth of new canes. This is a natural rejuvenation procedure replacing old canes with new.
- Pruning produces larger and better blooms as the vitality of the plant goes to the blossoms, rather than to supporting heavy wood growth.
- Remove poorly shaped longer branches to retain the natural shape of the shrub.
- Remove broken, dead or diseased branches for health, neatness and vigor.
- Shrubs with unusual bark coloring should have the older canes removed, as the full natural coloring is displayed best in the new growth.
- Certain varieties of shrubs sucker from the roots. Remove these suckers unless you want the shrub to spread and form colonies.

Pruning shrubs is primarily thinning out older undesirable canes. Plants such as hydrangeas, altheas, tea roses, tamarix and dogwoods should have all canes pruned back to produce larger flowers or more brightly colored canes.

The form of a tree may be controlled by pruning. If you desire a tall tree with a high crown, prune the lateral branches from the trunk and prevent formation of low crotches. For a low, stocky tree used in screens and windbreaks, cut back the top shoots to force side growth.

Remove oldest wood and center branches (a few each year).





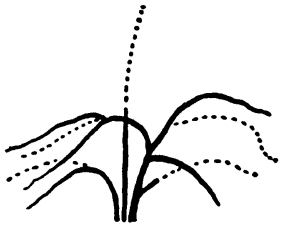
Prune Late-Flowering Shrubs Early

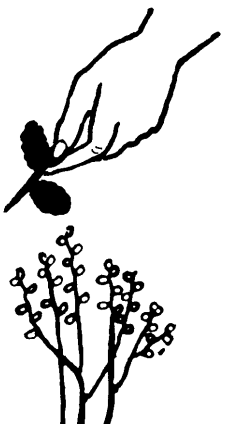
Midsummer-flowering shrubs form flower buds on new wood. For maximum bloom, prune them in early spring before the new wood begins to grow.

Prune Early-Flowering Shrubs Later

Spring-flowering shrubs form flower buds in the summer after they are finished blooming. For maximum bloom the following year, prune them immediately after their bloom is over.

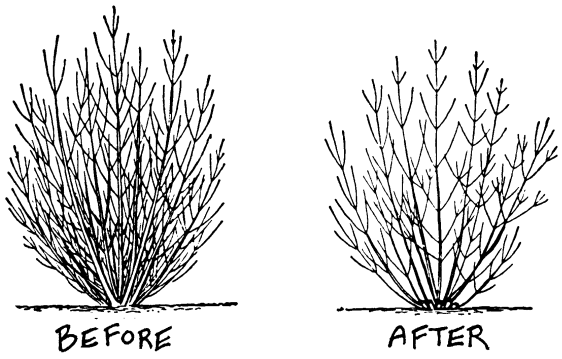
Retain natural arching habit by pruning branches after flowering. Otherwise new growth starts at the tips of flowering branches and the shrub gets top-heavy.





Pinch off the growing tips and remove flowers as soon as faded.

Prune For Healthy Growth

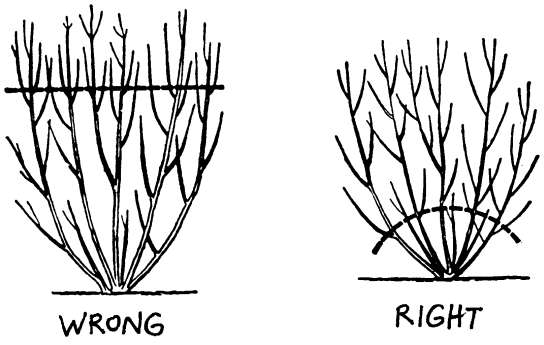


Before

Your shrubs will tell you when they need thinning. Shrubs such as Honeysuckle send up too many canes for optimal growth. Cut off a few of the oldest and least vigorous branches close to the ground. Do not injure the bark on canes to be saved.

After

Note the difference thinning of canes makes. Air and light can now penetrate. Fewer canes promote vigor, health and vitality. Plants will produce more and larger blossoms. Slow growing, less vigorous shrubs seldom need thinning out.



Prune For Symmetry and Appearance

Cutting back shrubs straight across the top is a common error. This encourages top-growth and the lower part of the shrub, with no foliage near the base, becomes woody and unsightly. Growth stays low and bushy when properly pruned.

Proper pruning promotes growth at the base of the shrub. Larger flowers on hydrangeas, altheas, hybrid tea roses, tamarix and butterfly bush are obtained by severe pruning. Colorful branches and twigs on dogwoods develop on new stems.

What To Do with Overgrown Shrubs

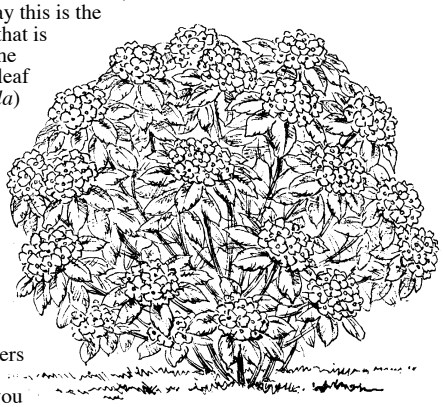
Overgrown shrubs with little foliage near the base may be rejuvenated by cutting down each cane at the ground line in early March. All overgrown shrubs should be pruned thusly, even though early blooms may be sacrificed.

Shrubs cut back for rejuvenation will send forth new shoots in late spring. This growth will be bushy with foliage clear to the ground. Pinch off tops when the desired height is attained. It usually takes two to three years to rejuvenate shrubs and hedges completely.

***Hydrangea arborescens* 'Annabelle' Hydrangea** 3-5' x same. A major improvement over the old standard herbaceous hydrangea. A very upright yet rounded shrub, the earliest and most erect of the hydrangeas. Large clusters (up to 1') of showy white to faint-yellow flowers bloom from late June till September. Big 5–6" almost heart-shaped foliage. Grows fast, suckers freely, thrives in shade. Cut to the ground and fertilize lightly in late winter for stunning bloom next summer. Suited to perennial borders and naturalized gardens. A Pennsylvania Horticultural Society's Gold Medal Plant Award winner. Species native to eastern U.S. Z3. **ME Grown.** (medium plants)

5168 Annabelle Hydrangea, $16.00

***H. macrophylla* 'Endless Summer' Hydrangea** 3-5' x same. Bailey Nursery Introduction, St. Paul, MN, 2004. The real name of this hydrangea is **The Original**, though most people think of it as Endless Summer. There are now actually three Endless Summers, each with a different color flower. Figure that one out. Anyway this is the blue-flowering hydrangea that is causing all the hoop-la in the gardening world. Most bigleaf hydrangeas (*H. macrophylla*) bloom only on old wood. After a typical Maine winter you get dead flower buds and no flowers. 'Endless Summer: the Original' blooms on old and new wood. Even if the plant dies to the ground, you'll get large showy 8" mop-head blooms that same summer. Please note, however, that some gardeners have been disappointed. To ensure blue flowers, you must have acidic soil. Otherwise they'll be pink. To acidify the soil, try following Henry Homeyer's advice from the University of New Hampshire: "Dig a hole twice as wide and twice as deep as the rootball. Discard half the soil, and mix the remaining soil with an equal quantity of moist peat moss. Peat moss is naturally acidic, and will also help to prevent wilting of the leaves on hot days.…[Do not apply any] fertilizer, particularly soluble chemical fertilizers.…Adding too much nitrogen…means that your plant will grow rapidly, and have nice dark green leaves, but produce few flowers." Sun or partial shade. Prefers deep well-drained acid soils with lots of organic matter. Native to Japan. Z4. (medium plants)

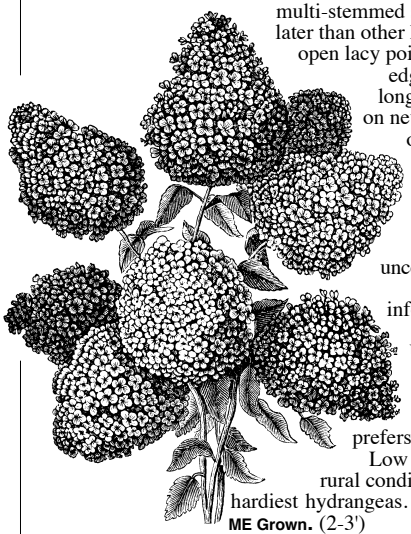


5172 Endless Summer Hydrangea, $16.00

***H. paniculata* 'Limelight' Hydrangea** 6-8' x same. Pieter Zwijnenburg, Jr. introduction. Boskoop, Netherlands. Pennsylvania Hort Society Gold Medal 2006. Large (6–12") upright very creamy-white flowers turn lime-green in August and then pale rose in fall. The contrasting colors are delightful. We gave Limelight to grower Jen Ries for trial, and she fell in love. Now she's become our supplier. Train to a shrub or small tree. Blooms on new wood. Prune late fall or early spring. Remove spent flower heads. Dark green foliage. Full sun-partial shade. Soil adaptable but prefers good loam with moderate moisture. Species native to North and South America and eastern Asia. Z3/4. **ME Grown.** (9-18" transplants)

5182 Limelight Hydrangea, $16.00

***H. p.* 'Tardiva' Late Panicle Hydrangea** 10-15' x 8-10' Large upright shrub that can be trained to small tree, but is most effective as a multi-stemmed specimen. Blooms July–September, later than other hydrangeas. Creamy-white partially open lacy pointed conic panicles, turn pinkish on edges—almost purple-red and provide long-lasting blooms. Because it flowers on new wood, you can prune early spring or late fall. DM van Gelderen writes in the *Encyclopedia of Hydrangeas* that "True Tardiva is relatively rare; often plants are mixed or replaced by the much commoner Floribunda. Origin of Tardiva is uncertain.□According to Bean (1991), it is a French introduction. Our information states that it was raised by Crown Commissioners, Windsor, United Kingdom, before 1975." We are hoping these *are* the true Tardiva! Vigorous and fast growing. Full sun to partial shade, prefers rich loamy moist well-drained soil. Low maintenance. Adapted to urban and rural conditions, even the seashore. One of the hardiest hydrangeas. Native to east Asia and Japan. Z3. **ME Grown.** (2-3')



5184 Late Panicle Hydrangea, $16.00

***Ilex glabra* Inkberry** 6-8' x 8-10' Also called **Gallberry**. Upright oval medium-sized native evergreen shrub that likes it acidic and wet. Will spread and sucker slowly forming colonies over time. Recommended for massing, naturalizing, mixed shrub borders and evergreen hedges. Small white flowers in spring followed by pea-sized black berries in fall that will persist through winter if not eaten by birds. Flat 1–2" long lustrous dark green leaves, may take on a bronzy-purple cast. Roasted foliage used as a tea. Gets leggy with age and may thin out down low but, if you're looking for a more compact form, responds well to shearing. Full sun to moderate shade. Low maintenance; though it generally prefers wet acid soils, it is adaptable to drier conditions and higher pH. Native to eastern North America, Nova Scotia to Texas. Z4. **ME Grown.** (6" transplant shrub)

5188 Inkberry, $11.00

***Ilex verticillata* Winterberry** A staple of the Maine landscape. Deciduous suckering holly with clusters of upright stems. One of the few berry plants that grows even in dry shady spots. Lustrous deep green leaves retain their color long after they're cut for decoration. Richly foliated, but open enough to display its interesting branching structure. Best known for profusions of bright red 3/8" berries which stand out after the leaves have fallen and keep their color all winter, looking spectacular against the snow. Excellent fall wildlife forage plant. Tolerates dry conditions but prefers moist or wet acidic soil, even standing water. Sun or partial shade. No serious pests or diseases. Male and female plants required for fruit. Plant males within 30' of females. Native from midwestern to eastern U.S. Z4.

***I. v.* 'Red Sprite'** 3-5' x 4-8' Female plant. USDA introduction. Smaller plant than the straight species with an attractive low loose rounded form. Winner of the 1998 Cary Award for Distinctive Plants for New England. 'Jim Dandy' male required for fruit. (4-6" transplants)

5189 Red Sprite Winterberry, $11.00

***I. v.* 'Jim Dandy'** 3-6' x 4-5' Male selection to pollinate 'Red Sprite' winterberry. One will pollinate several females. (9-12" transplants)

5193 Male Jim Dandy Winterberry, $11.00

***I. v.* 'Winter Red'** 9x8' Female plant. Considerably larger than 'Red Sprite'. Darker green foliage. Winner of the 1995 Styer Award. 'Southern Gentleman' male required for fruit. **ME Grown.** (12-16")

5197 Winter Red Winterberry, $11.00

***I. v.* 'Southern Gentleman'** 6x6' Male selection to pollinate 'Winter Red' winterberry. Don't be deceived by the name—it's hardy. One will pollinate several females. **ME Grown.** (9-16" transplants)

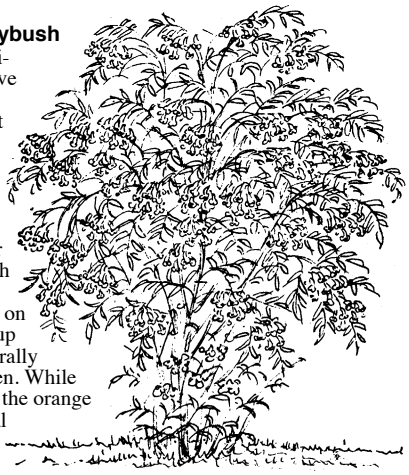
5201 Southern Gentleman Winterberry, $11.00

***Itea virginica* 'Henry's Garnet' Virginia Sweetspire** 3-5' x 5-6' Swarthmore College, PA. Spreading shrub with an erect clustered branching habit. Fragrant white flowers on upright racemes up to 6" long in early summer. Bright green foliage, brilliant reddish-purple fall color. Will form colonies. Henry's Garnet has both superior flowers and fall color. Winner of the prestigious Styer award and the 1999 Michigan Growers' Choice award. Recommended for moist or wet areas although quite drought tolerant as well. Sun or shade, pH adaptable. Species native to eastern U.S. Z5 or maybe 4. (10-12" transplants)

5204 Henry's Garnet Sweetspire, $10.00

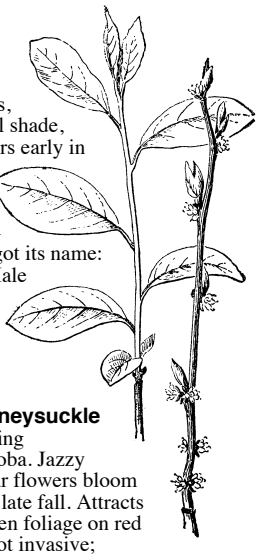
ME Grown = grown in Maine by a member of the Fedco growers coop

***Kolkwitzia amabilis* Beautybush** 6-10' x 6-8' Fast-growing multi-stemmed shrub that likes to have plenty of room for its old-fashioned slightly unkempt arching vase-shaped form. Blooms in June, just before the mockorange and after the lilacs. Completely covered with small fragrant medium-pink 5-petaled tubular flowers, each throat etched with a web of yellow-orange veins and dots. The blossoms appear on the side shoots of every stem, up to 20 per cluster. There are literally thousands on a mature specimen. While the overall appearance is pink, the orange throat enriches the color. A real knock-out. Matte bluish-green slightly rugose foliage. Brown and grey exfoliating bark. Yellow and red fall color. Can also be pruned to a small 3–7 trunk tree. Flowers can be forced indoors in spring. Prune after flowering, removing the oldest branches back to the ground. Excellent as a specimen or background shrub for short-statured plantings. Easy to grow in any type of soil. Prefers full sun. No serious pests or disease. Native to central China. Z4. **ME Grown.** (28-36")



5210 Beautybush, $11.00

***Lindera benzoin* Spicebush** 6-12' x 8-12' Large rounded multi-stemmed flowering native shrub suited to naturalizing in moist or wet areas, singly or in groups. Often found in full or partial shade, but at its showiest in full sun. Soft-yellow flowers early in spring followed by small clusters of glossy red berries by mid to late summer. Will attract bees birds and butterflies. Blue-green foliage turns golden yellow in fall. Scratch the berries, foliage or stems and you'll know where it got its name: all three have a delicious lemony-spicy scent. Male and female plants required for fruit. These are unsexed seedlings. Prefers moist well-drained neutral or slightly acidic soils. Native to eastern U.S. Z4. **ME Grown.** (9-12" transplants)



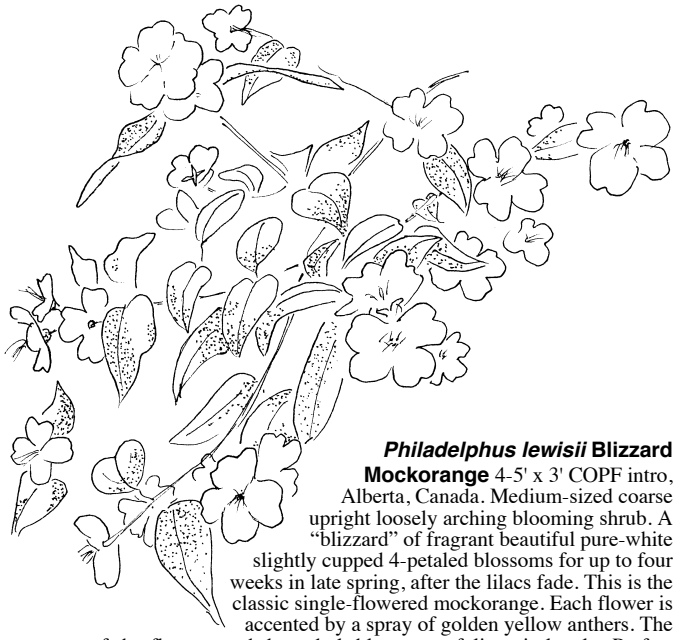
5215 Spicebush, $12.00

***Lonicera* x *brownii* Dropmore Scarlet Honeysuckle** 10-20' (*L. sempervirens* x *L. hirsuta*) Tall climbing honeysuckle developed by FL Skinner in Manitoba. Jazzy whimsical clusters of 1 1/2" scarlet-orange tubular flowers bloom profusely and tirelessly from early summer into late fall. Attracts hummingbirds and butterflies. Striking blue-green foliage on red stems. Great for fence or arbor. Easy to grow; not invasive; generally free of insects and diseases. Flowers the first year. Considered the hardiest vining honeysuckle. Z3. (2-yr medium plants)

5222 Dropmore Scarlet Honeysuckle, $10.00

***Myrica pensylvanica* Bayberry** 5-9' Rounded deciduous semi-evergreen very salt-tolerant shrub thrives in full sun to partial shade, sandy poor soils to heavy clay soils. A common sight on Maine's coastal islands. Rubbing the glossy deep green leaves between your fingers produces one of the most delicious smells in the world. Small greyish-blue waxy berries produced on female plants are highly aromatic, historically used for making candles. Plants feed numerous wildlife species and are especially craved by swallows. Excellent in masses or hedges, tends to sucker. Fixes nitrogen. Tends toward being dioecious: male and female plants required for good fruit development. We're offering unsexed plants; plant several if you desire fruit. Native to eastern U.S. Z2/3. (12-24" transplants)

5240 Bayberry, $12.00



***Philadelphus lewisii* Blizzard Mockorange** 4-5' x 3' COPF intro, Alberta, Canada. Medium-sized coarse upright loosely arching blooming shrub. A "blizzard" of fragrant beautiful pure-white slightly cupped 4-petaled blossoms for up to four weeks in late spring, after the lilacs fade. This is the classic single-flowered mockorange. Each flower is accented by a spray of golden yellow anthers. The contrast of the flowers and deep dark blue-green foliage is lovely. Prefers moist rich well-drained soils but will grow well in most conditions. Full sun to partial shade. Prune after flowering. Native to western Asia. Z3. **ME Grown.** (18-32" robust, multi-branched)

5267 Blizzard Mockorange, $12.00

ME Grown = grown in Maine by a member of the Fedco growers coop

***Potentilla fruticosa* Potentilla** Also called **Shrubby Cinquefoil** or **Widdy**. A compact rounded to broadly rounded bushy shrub with showy five-petaled rose-like flowers. Flowers all summer long, beginning the first year. Very small attractive grey-green compound leaves. Excellent landscape plant for shrub borders, low hedges, rock walls and steps. Loved by bees. Full sun or partial shade. Best in fertile moist well-drained soil, but tolerates poor dry soil. Said to need sweating before planting to break dormancy, but I've been planting them without any special treatment for years and have never had a failure. Unbelievably hardy. Native to Northern Hemisphere. Z2.

***P. f.* 'Abbotswood'** 2-3' x same. Prolific, pure white single flowers with light yellow stamens. Begins to flower about mid-June in central Maine. The first of the potentillas to bloom in our yard, at least a couple weeks before 'Primrose Beauty' and nearly a month before 'Pink Beauty'. The bloom is quite heavy for several weeks, then slacks off a bit but still keeps putting out a stream of small cheerful white flowers. Very nice selection. Few problems with insects or disease. Originated in Holland. **ME Grown.** (18-24" transplants)

5288 Abbotswood Potentilla, $10.00

***P. f.* 'Mango Tango'** 2x2' Univ of Manitoba intro, Canada. Unusual tri-color orange red and yellow blooms. Bright green foliage. Colors look brightest in cooler weather and full sun. **ME Grown.** (6-24" beefy plants)

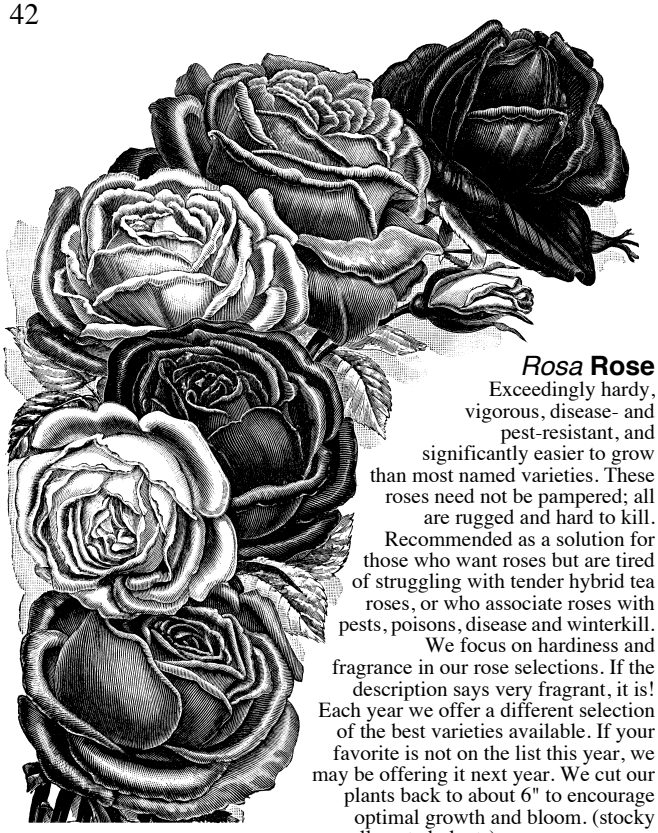
5306 Mango Tango Potentilla, $10.00

***P. f.* 'Pink Beauty'** 3x3' Recent Univ of Manitoba intro. Soft-pink petals edged in fainter pink. Although a frequent complaint about pink cultivars is that the color fades, in our experience Pink Beauty holds its color extremely well. Good fertility will help reduce fading. **ME Grown.** (12-20")

5312 Pink Beauty Potentilla, $10.00

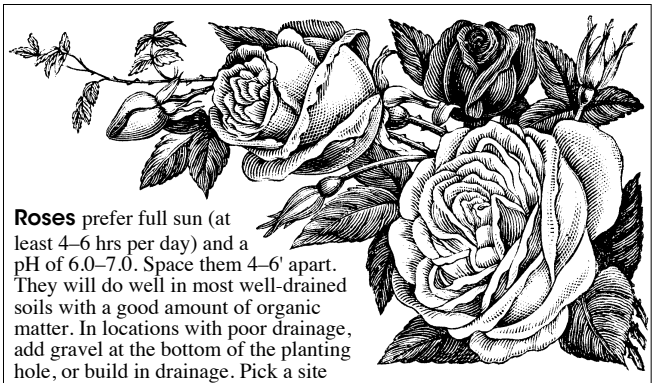
***P. f.* 'Primrose Beauty'** 3x3' Faint yellow flowers with a slightly deeper yellow center and yellow stamens. From a distance the color appears creamy. This is a good choice if white is too white and the yellow cultivars are too garish. In groupings, it complements white potentillas quite nicely and helps tame the "gold" cultivars. **ME Grown.** (18-24" transplants)

5314 Primrose Beauty Potentilla, $10.00



Rosa Rose

Exceedingly hardy, vigorous, disease- and pest-resistant, and significantly easier to grow than most named varieties. These roses need not be pampered; all are rugged and hard to kill. Recommended as a solution for those who want roses but are tired of struggling with tender hybrid tea roses, or who associate roses with pests, poisons, disease and winterkill. We focus on hardiness and fragrance in our rose selections. If the description says very fragrant, it is! Each year we offer a different selection of the best varieties available. If your favorite is not on the list this year, we may be offering it next year. We cut our plants back to about 6" to encourage optimal growth and bloom. (stocky well-rooted plants)

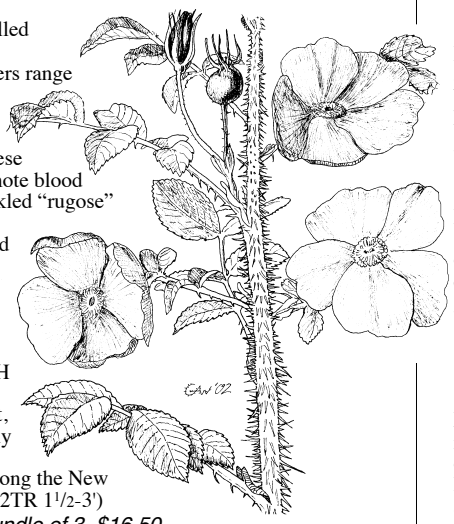


Roses prefer full sun (at least 4–6 hrs per day) and a pH of 6.0–7.0. Space them 4–6' apart. They will do well in most well-drained soils with a good amount of organic matter. In locations with poor drainage, add gravel at the bottom of the planting hole, or build in drainage. Pick a site with good air drainage, but avoid sites with cold northwest winds. Avoid competition with tree roots.

Plant roses as early as soil can be worked. Most roses' roots don't spread beyond the original hole, so dig a bushel-sized hole, as deep as 2' or more. We recommend a bale of rotten hay in the bottom of the planting hole. Mix soil with liberal quantities of well-rotted manure and compost. Add a coffee-can full of rock phosphate or bone meal.

Soak in water overnight or up to three days before planting. Prior to planting, prune roses back to 3 canes, 4–5" tall. Plant them 1" below the level they were in the nursery. Add water as you fill in the hole to puddle it in. Mound soil around branches to prevent them from drying out, and to encourage buds to sprout. As the buds open, pull back the soil to the correct level.

Shrub roses and climbers will require little pruning in later years. Remove dead or broken branches, and periodically cut out the oldest wood. Keep them well mulched to retain moisture and reduce weeds. Add 2 shovelfuls of composted manure to each crown late in the fall. For more information see Suzanne Verrier's pamphlet *Growing Old-Fashioned Hardy Roses Organically,* available in the book section of our Seed Catalog.



R. rugosa 4-6' x same. Also called **Japanese Rose** or **Beach Rose**. Vigorous spreading shrub. Flowers range from deep pink to white. Red hips up to 1" for jams, teas, and fresh eating right off the bush. Flowers used in traditional Chinese medicine to regulate *qi* and promote blood circulation. The dark green wrinkled "rugose" leaves form a backdrop for the highly fragrant single flowers and the large edible hips which follow. Blooms form on both old and new wood, so pruning is unnecessary except to control size. Prefers full sun and well-drained fertile soil with a pH of 6-7, but will grow in depleted soil and even sand. Tolerates salt, pollution, and drought; practically care-free. Native to China and Japan, and a common sight all along the New England coast. Z2. **ME Grown.** (2-2TR 1½-3')

5350 Rosa rugosa, bundle of 3, $16.50

***R.* 'Carefree Sunshine'** 3-4 x same. A cross between two unnamed seedlings. William Radler intro, 2001. Also called *Rosa* 'RADIson'. Lemon-yellow to bright yellow, lightly fragrant semi-double (5-10 petals) flowers in late spring and early summer, repeating until frost. Flowers resist fading even in summer heat. Glossy dark green foliage turns bronze-green in fall. Orange hips. Compact rounded form, suitable for garden specimens, borders or hedges. Very disease resistant. Z4.

5384 Carefree Sunshine Rose, $11.00

***R.* 'Hansa'** 7x7' Unknown parentage. Schaum and Van Tol, Holland, 1905. Large 3" very fragrant full (25-30 petals) purplish-red flowers bloom throughout early summer with rebloom in fall. Large vigorous vase-shaped mounded shrub. Glossy dark green disease-free foliage turns yellow-orange in fall. Prolific large showy red-orange hips. Z3.

5424 Hansa Rose, $11.00

***R.* 'Hope For Humanity'** 5x5' [(Prairie Princess x Morden Amorette) x (Morden Cardinette x seedling)] Collicutt & Davidson introduction, Parkland Series. Morden, Canada, 1995. Named in honor of the 100th anniversary of the Canadian Red Cross. Wine-red buds and deep "blood" red blossoms. The double (15-25 petals) cupped flowers resemble tea roses. Light fragrance. Continuous summer blooming from June into fall. Lustrous green disease-free foliage. No hips to speak of. Upright habit. Z3.

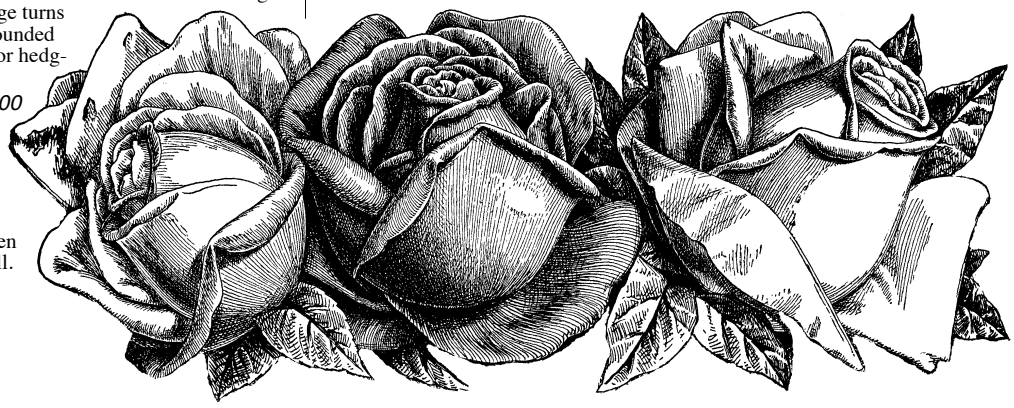
5442 Hope for Humanity Rose, $11.00

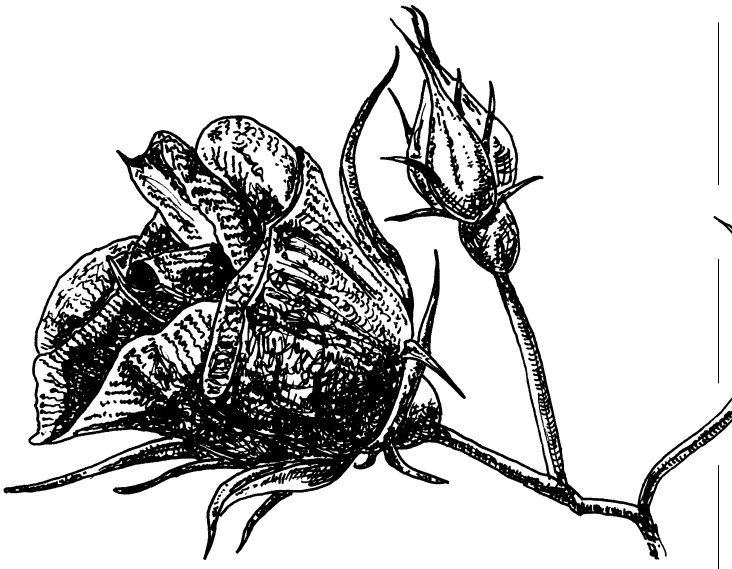
***R.* 'Morden Blush'** 3x3' (Prairie Princess x Morden Amorette) x {Prairie Princess x [White Bouquet x (*R. arkansana* x Assiniboine)]} Parkland Series, Manitoba, Canada, 1988. Pointed ivory buds followed by a profusion of very double sweetly fragrant small creamy flowers blushed pink in the center. Blooms from early summer until frost. Low-growing form with glossy green foliage. Red-orange hips. Although Morden Blush looks something like a hybrid tea, don't be fooled; it's hardy to Zone 3 or even Z2. **ME Grown.**

5488 Morden Blush Rose, $11.00

***R.* 'Morden Sunrise'** 3x3' Sunsprite x unnamed seedling. Parkland Series, Manitoba, Canada, 2000. Yellow-orange buds open to semi-double multi-colored flowers, each one a deep rich yellow in the center fading into orange and then into pink at the blossom edge. This is a rose on fire. If you like yellow and orange, you will not be disappointed. The colors are strong and vibrant. As the fragrant flowers mature they fade to a creamy yellow white. The low-growing shrub blooms all summer on canes that turn reddish brown in winter. Shows minor dieback some winters but then recovers nicely and blooms profusely. Resistant to blackspot. Z3/4.

5493 Morden Sunrise Rose, $11.00





***R.* 'Purple Pavement'** 4x4' *R. rugosa* hybrid, seedling of 'White Hedge', part of Pavement Series. Karl Baum intro, Germany, 1983. Bright purplish-pink flowers with golden stamens can look lavender-mauve in the shade. Semi-double (12-16 ruffled petals) with a strong spicy sweet fragrance. Blooms all summer until frost. Compact shrubby habit suitable for groundcovers. Benefits from frequent dead-heading. Yellow-maroon fall color. Large dark red hips. Z3.

5500 Purple Pavement Rose, $11.00

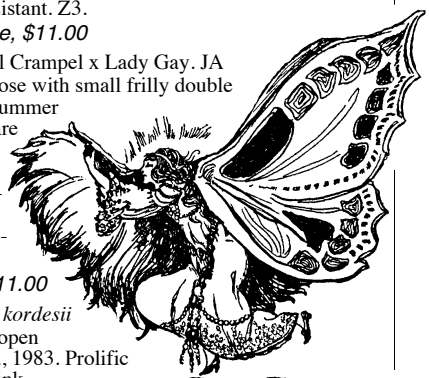
***R.* 'Seven Sisters'** 10-15' x 4' (*R. multiflora* 'Platyphylla') Japan, 1817. Clusters of seven perfectly shaped and tightly petaled petite fragrant 1–2" double (17-25 petals) flowers, like little frilly buttons, bloom simultaneously in seven different colors from creamy white to various pinks to reds to crimson. It's like having an entire rose garden on one bush. Blooms most of July up here. A strong climber that can also be used as a groundcover or a rambler. Large dark green foliage. Covered with tiny red hips in fall. Z4. **ME Grown.**

5519 Seven Sisters Rose, $11.00

***R.* 'Schneekoppe'** 3x3' (*Snow Pavement 6446*) Baum, Germany, 1986. Very faint lilac purple blooms are practically white but most definitely not so. Some say slightly pink, but I see purple. The light color is soothing to the eyes. A personal favorite. Semi-double (12-16 petals), recurrent and fragrant. Loose low shrubby form spreads slowly but suckers here and there. Red hips. Clean foliage, disease resistant. Z3.

5529 Schneekoppe Rose, $11.00

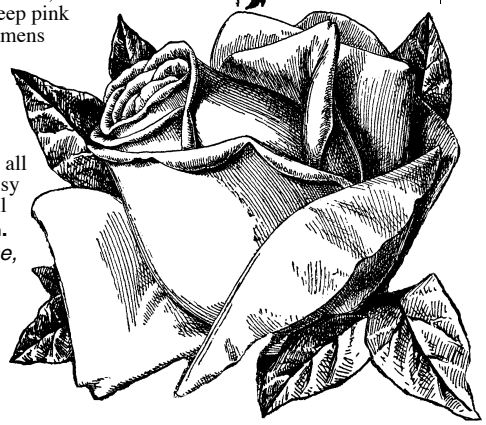
***R.* 'The Fairy'** 2-2½' x same. Paul Crampel x Lady Gay. JA Bentall, England 1932. Polyantha rose with small frilly double pastel pink flowers that bloom all summer in large pendulous clusters. There are so many petals packed into each bloom you'd never know there are stamens hiding in there. Low growing graceful spreading plant. Tolerates poor soils and neglect. Disease-free foliage. Z4. **ME Grown.**



5533 The Fairy Rose, $11.00

***R.* 'William Baffin'** 8-10' L48 [*R. kordesii* Wulff x (Red Dawn x Suzanne)] x open pollinated. Explorer Series, Canada, 1983. Prolific 2–3" semi-double luminous deep pink flowers with bright yellow stamens bloom continuously all summer on upright slightly arching long flexible canes suitable for a tall hedge or arbor. Vigorous and disease resistant. Can be left on trellis all winter in most locations. Glossy foliage. Light fragrance. Small red-orange hips. Z3. **ME Grown.**

5544 William Baffin Rose, $11.00



ME Grown = grown in Maine by a member of the Fedco growers coop

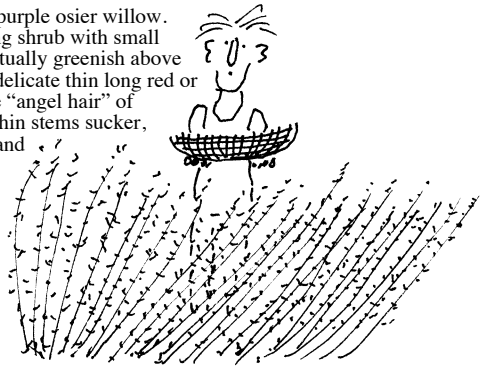
***Rubus odoratus* Thimbleberry** 3-6' x 6-12' Also called **Flowering Raspberry**, **Ornamental** or **Purple-flowering Raspberry**. Native ornamental relative of the cultivated raspberry suited for the garden and for attracting birds. Attractive five-petaled, rosy-purple fragrant blooms from June to August. Cup-shaped red berries are edible though somewhat dry and seedy. Birds will love them—you probably won't. Lobed palmate maple-like leaves turn pale yellow in fall. Very vigorous hairy thornless stems will sucker and spread forming a colony. Average soil. Good shade tolerance. Native to eastern North America. Z3. **ME Grown.** (2½-5')

5562 Thimbleberry, $8.00

***Salix gracilistyla* 'Melanostachys' Black Pussy Willow** 6-10' x same. Very attractive fast-growing plant for wetland areas. Deep purple-black male catkins in early spring, suitable for the dining table or kitchen windowsill. The rather short foliage emerges orange and then turns a deep green. Stems assume a rich purple-black color in winter. Very nice dark colors all year. Winner of Royal Horticulture Society Award of Garden Merit. Prune in summer or fall. Full sun, prefers moist soils, pH adaptable but does not like shallow chalky soils. Native to eastern Asia. Z4. **ME Grown.** (12-15")

5568 Black Pussy Willow, $9.50

***S. purpurea* 'Nana' Blue Leaf Arctic Willow**

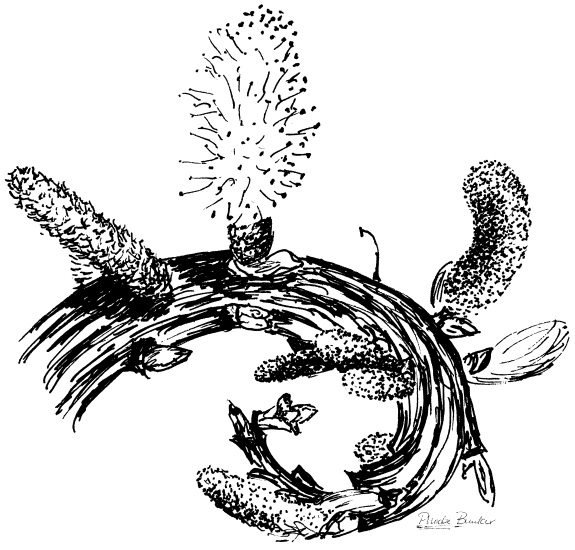


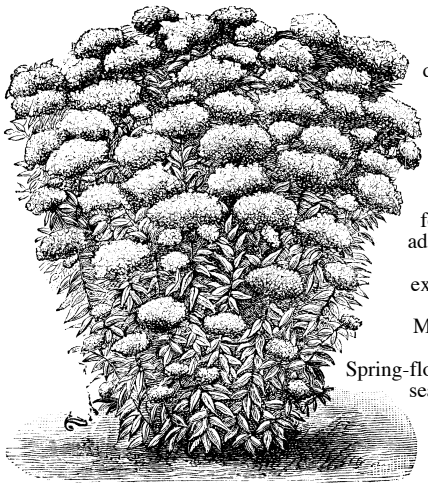
3-5 x 3-6' Selection of purple osier willow. Medium-sized spreading shrub with small narrow blue foliage (actually greenish above and blue beneath) and delicate thin long red or green stems. This is the "angel hair" of willows. The graceful thin stems sucker, layer and form a thick and highly attractive ornamental mass. Long cultivated and used for fine-textured basket-making. Excellent bank or hedge plant, especially in wet areas but also quite suitable for a highly visible location. I've seen it used in a perennial bed; it looked great. If it gets too overgrown, cut it to the ground every couple of years and it'll come right back. Native from Europe to North Africa to Japan. Z3. **ME Grown.** (9-12" bushy plants)

5577 Blue Leaf Arctic Willow, $9.50

***S. sachalinensis* 'Sekka' Japanese Fantail Willow** 10-15' x same or wider. Sometimes called *S. udensis* 'Sekka'. Male selection, Japan before 1700. Fantastic large wide dense spreading disheveled shrub with highly ornamental curled and flattened branches. Not wiggly or loopy like the contorted willows or Harry Lauder's Walking Stick. Rather, these branches are flattened and bundled (fasciated) and often curled like the neck of a violin near the branch tip. We cut the reddish-golden surreal branches in winter for arrangements: the dried stems look great on the table for years. Covered with yellow-stamened catkins in spring. Recommended for an impenetrable hedge or low windbreak. If it gets out of hand, trim it up or cut it back any time of year. Glossy green summer foliage turns yellow in the fall. Highly adaptable, you can grow it anywhere. Ours like it wet, but there is a massive hedge in Unity at MOFGA's Common Ground on the driest soil known to man. Native of Japan. Z4. **ME Grown.** (6-24")

5582 Japanese Fantail Willow, $12.00





***Spiraea* Spirea** includes nearly 100 species of deciduous shrubs native to the northern hemisphere, all with profuse and often very showy small white, pink or red flowers, arranged in flat or round clusters or in pyramidal spikes. Varying in form and size, spireas are very adaptable, thriving in most soils with a full to partially sunny exposure and average moisture. Two well-known natives are Meadowsweet (*S. latifolia*) and Hardhack (*S. tomentosa*). Spring-flowering species bloom on last season's growth. Prune some of the growth in early spring to increase the flower cluster size. The summer-flowering species bloom on this year's growth and usually require no pruning at all. We vary our selection annually, this year featuring recent releases.

S. japonica var. **Galen 'Double Play Artist'** 2½ x□3' Tim Wood introduction, Michigan, 2008. Large rich magenta-purple blooms, a color unique among spireas. Flowers in late spring and early summer, repeating until frost. Attracts butterflies. Foliage emerges purple-red in spring and matures to an unusual blue-green. Very neat compact mounded habit, ideal for shrub borders. Double Play Artist (and a second selection, Double Play Gold) are the result of the breeding efforts of Tim Wood who evaluated more than 1500 seedlings over the course of ten years. Species native to Japan and eastern Asia. Z4. **ME Grown.** (8-10")

5640 Double Play Artist Spirea, $12.00

***S. j.* 'Neon Flash'** 3x4' Electric reddish-hot pink blooms reminiscent of the Old Orchard Beach boardwalk on a warm July evening. Blooms throughout midsummer, lasting longer than most spireas before fading.□New growth is tinged with purple in spring, turns to green in summer, and then burgundy in the fall. Very tidy compact rounded clump-forming growth habit, suitable for shrub borders or as a backdrop for perennials. Will attract butterflies, bees and birds. Z4. **ME Grown.** (8-10")

5676 Neon Flash Spirea, $12.00

***S. media* 'Darsnorm' Snowstorm Spirea** 3-4' x same. Oriental hybrid introduced by Darthuizer Nursery, Netherlands, 2003. A snowstorm of huge (6–8") clusters of small white flowers cover most of plant, attracting butterflies, from early summer until frost. Blue-green summer foliage turns bright orange and red in the fall, another good alternative to the dastardly burning bush. Very neat low mounded rounded habit. Effective as specimen plant or in large masses. Easy to grow, widely adapted to different soils. Z4. **ME Grown.** (8-10")

5683 Snow Storm Spirea, $12.00

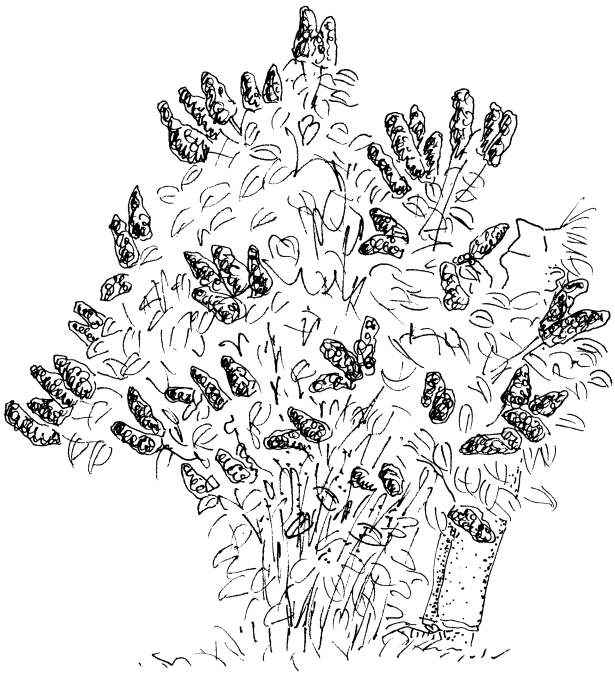
***Symphoricarpos albus* White Snowberry** 5-6' x same. Also called **Common Snowberry** or **Waxberry**. Broad rounded arching spreading long-stemmed wildlife shrub. Medium-small ripple-edged foliage of muted multi-shaded blues and greens. The edge of each leaf is unique, a bit like sassafras in that respect. Quite beautiful all summer. Excellent for holding soil on a steep shady moist bank and providing good wildlife cover and forage at the same time. Will spread with age and eventually form colonies. Mine has thrived for years in a corner at the back of the house in a hodgepodge of ferns, raspberries and a looming lilac; it's just now beginning to spread. Inconspicuous pinkish flowers in late spring, followed by plump ½" whitish berries which persist until the birds get them. Easy to transplant, adaptable to most soils, sun or shade, even clay and city conditions. Drought tolerant. Native eastern U.S. south to Virginia. Z3. **ME Grown.** (12-18" transplants)

5720 White Snowberry, $10.00

***S. orbiculatus* Coralberry** 3-5' x 4-8' Also called **Red Snowberry**, **Buckbrush**, **Indian Currant** and **Devil's Shoestring**. Low-growing spreading arching shrub. A good wildlife plant for banks and hillsides. Dense clusters of small pinkish or purplish-green flowers in early summer followed by clusters of small purple-red berries that persist into winter. Will attract insects, bees and birds. Some say unattractive to deer, but others say otherwise (hence the name, Buckbrush.) Red fall foliage. Adaptable to most soils, moist or dry. Shade or sun. Native eastern U.S., west to OK and north into parts of Canada. Z4. **ME Grown.** (12-22" transplants)

5723 Coralberry, $10.00

ME Grown = grown in Maine by a member of the Fedco growers coop



Syringa **Lilac** is known nearly everywhere by some variation of the Persian word *lilak* (meaning 'bluish'), but lilacs actually range from brilliant white to pink to red to every conceivable shade of purple and even blue. From small shrubs to large shrubs and trees, compact vase-shaped specimens to huge rounded spreading masses, only the crabapple offers a greater selection among ornamental woody plants. Twenty-three species make up the genus *Syringa*, two of which are native to the limestone mountains of southeastern Europe, while the rest are native to the temperate Far East. First brought to America nearly four hundred years ago by French Jesuit missionaries, there are ancient specimens on Michigan's Mackinac Islands with trunks nearly two feet in diameter.

Lilacs are excellent alone or in hedges. Deep green glossy heart-shaped foliage looks good from spring through fall. Intensely fragrant blooms in May over a period of several weeks.

As with roses and crabapples, we vary our list each year to give you a wide selection. If you have suggestions for cultivars you'd like us to offer, please let us know. The Lyle Littlefield Garden remains the best place in Maine to see lilacs in bloom. If words can't do it for you, go to Orono next May or take a trip to the Arnold Arboretum just outside Boston for the world-famous Lilac Sunday. See #**4912**, p. 34, for Tree Lilac. (large 2-3 year old transplants)

S.* x *hyacinthiflora (*S. vulgaris* x *S. oblata dilatata*) **'Asessippi'** 8x10' Frank L. Skinner intro, Dropmore, Manitoba, Canada, 1932. Early-season suckering wide-spreading shrub. Although it's generally described as faint light purple, I see a lot of bright pink in the prolific 3 x 3½" panicles. Flowers occur all through the shrub with heavy blooming even on the lower branches. The panicles don't hang, rather they reach out from the foliage. A beautiful plant. Asessippi is one of several hybrids developed by Dr. Skinner during the early 20th century employing the pollen of *S. oblata dilatata*, the Early Blooming or Broadleaf Lilac of eastern Asia. Z3. **ME Grown.**

5741 Asessippi Lilac, $13.00

***S.* x *h.* 'Vesper's Song'** 9x9' [(*S.* x *hyacinthiflora* 'Pocahontas') x *S. v.* 'Marechal Foch'] John Fiala introduction, Falconskeape, Medina, OH, 1981. Single dark violet-purple abundant showy very fragrant blooms, with a two-toned appearance. One of the late breeder's favorite creations. He rated it as "excellent." Inter-specific cross. The flower clusters in hyacinthiflora are more loose and open than in the common *S. vulgaris*. Like other hyacinthifloras, will bloom later than the *vulgaris* types. New foliage growth has a lovely bronze color, turning burgundy in fall.□Z3. **ME Grown.**

5766 Vesper's Song Lilac, $13.00

***S. patula* 'Miss Kim'** 8x8' NH Agricultural Experiment Stn, 1954. Heavily scented extremely prolific small single ice-blue lavender blooms appear after the *vulgaris* types are gone by. Red-purple buds. Small dark green foliage turns dark maroon in fall. Descended from one of the twelve seeds that New Hampshire plant breeder Elwin Meader collected on a hike in 1947 while stationed in Korea as an Army horticulturist. Very compact rounded form. A few years ago, a customer sent us a photo of her "Fedco" Miss Kim and wrote, "Every time I see huge overgrown lilacs I doubly appreciate Miss Kim.…If you look closely at the photo you can see a few of the many, many butterflies that would cover these lilacs, almost like the blooms themselves." In the Arnold list of ten favorite uncommon lilacs. Z3. **ME Grown.**

5777 Miss Kim Lilac, $13.00

***S. vulgaris* Common Purple** 12-15' x same. A mass of medium-light purple blooms every year. A magnificent New England sight for nearly 400 years. When a nursery friend looked out our living room window and thought we had some fancy new cultivar, I chuckled, "Nope, just the good old common purple." Never a disappointment. Suckers freely, the best lilac for a spreading hedge. Z2. **ME Grown.**

5801 Common Purple Lilac, $13.00

***S. v.* 'Arch McKean'** 7x8' 'Agincourt Beauty' x 'Rochester' John Fiala intro, 1984. Rich reddish-purple buds and very large single showy upright silvery-magenta blooms. When I observed this lilac at the Arnold Arboretum a few years ago my notes say "dark purple." This spring I'm more inclined to call it reddish purple or magenta. It is definitely darker than most lilacs and contrasts wonderfully with any of the whites or lavenders. Non-suckering. Z4. **ME Grown.**

5809 Arch McKean Lilac, $13.00

***S. v.* 'Atheline Wilbur'** 10x10' [('Rochester' x 'Edward J. Gardner') x 'Rochester'] Fiala intro, 1980. Very fragrant large ragged floppy panicles of true pink. The buds are a darker rose-lavender punctuating the soft color of the blooms themselves. There may be a hint of lavender in there, but only a hint. Very nice. A connoisseur commented, "It could fade to white, but it doesn't!" Z3-4. **ME Grown.**

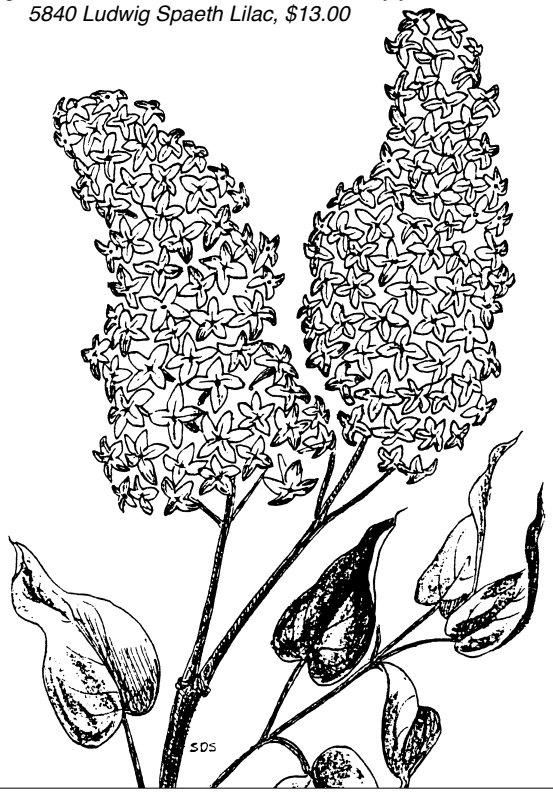
5813 Atheline Wilbur Lilac, $13.00

***S. v.* 'Avalanche'** 8-10' x same. 'Flora' x 'Carley' Fiala intro, 1983. Very showy, heavily fragrant single pure white blooms. Large florets on 4–8" dense panicles.□ Midseason bloomer. Vigorous, erect to rounded but irregular growth habit.□Best for shrub borders. Dark green foliage. Z3. **ME Grown.**

5817 Avalanche Lilac, $13.00

***S. v.* 'Ludwig Spaeth'** 10-12' x same. ('Andenken an Ludwig Späth') Späth Nursery, Berlin, 1883. Ludwig Spaeth's deep rich purple flowers are always a knock-out. Dark, yes, but never so dark that the color becomes flat and the highlights lost. This is a magnificent purple. Although I hesitate to use the word red, there is enough red in the purple to give it a regal look. Single deep purple flowers on large upright spires. Upright growth habit. Suckers profusely—an excellent hedge plant. Some say the newer cultivars are superior but I don't see it. Still a must for every yard! Z3. **ME Grown.**

5840 Ludwig Spaeth Lilac, $13.00



Lilacs are adaptable, easy to grow, nearly indestructible and practically maintenance-free. Plant them in a well-drained location in moderately rich soil. Sandy gravelly loam is perfect. They prefer sun at least two-thirds of the day. We suggest planting them with a shovelful of lime. Add another shovelful of lime every three years. A yearly mulch of manure or compost will encourage spectacular annual blooming.

How to Prune Lilacs

As the plant matures, prune off a quarter of the new suckers and oldest growth, a few main stems each year, and keep them trimmed down to an attractive height. No need to cut off spent flowers, but for best appearance remove flower heads as soon as they're through blooming, using care not to injure closest pair of leafy branches.

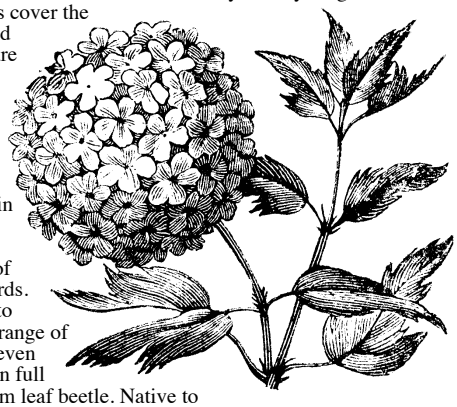
***Viburnum carlesii* Korean Spicebush** 4-8' x same. Also called **Koreanspice Viburnum**. One of the first shrubs to bloom in spring and the first wonderful fragrance in the garden. Plant it near the window you throw open on those first warm days. Its magnificent clove-like scent will permeate the house for two weeks. Showy cherry-pink buds open to white hemispherical flowers still with a hint of pink. Reddish-black fruits follow later. Broadly ovate serrated dusty dark bluish-green foliage turns reddish purple in fall. Compact rounded dense form. Use in the shrub border or as a specimen, if not near a window, then definitely somewhere you'll smell it every day. Will attract butterflies and birds.□ Named for William Richard Carles, British Vice-Consul in Korea in the 1880s who sent samples back to the Royal Botanic Garden at Kew in London. Prefers moist slightly acidic soil.□Prune after flowering. Native of Korea. Z4. (9-15")

5918 Korean Spicebush, $13.00

***V. cassinoides* Witherod Viburnum** 5-6' x same. Also called **Appalachian Tea** or **Northern Wild Raisin**. Rounded arching dense suckering native shrub. Creamy-white flowers with yellow stamens on 2–5" flat-topped cymes bloom from late spring into early summer. Highly desired for its multicolored edible fruit which turns from green to pink to red to blue before finally turning black in September. One fruiting cluster will feature several colors at the same time. Foliage, not so long ago used in tea, emerges bronze or purple tinted, turning dull dark green when mature and then orange-red, dark crimson and purple in fall. *Withe* is from the old English meaning a tough flexible twig or a band constructed of multiple twigs. Good for naturalizing as a specimen or in groups. Also suitable for the shrub border. Sun to partial shade. Very rugged: adapts to dry or wet sites. Native to eastern North America. Z3. (9-12" transplants)

5921 Witherod Viburnum, $13.00

***V. opulus* 'Roseum' Common Snowball Viburnum, Guelder Rose or European Snowball** 10-12' x same. Extremely showy large double snowball-like white flowers cover the vigorous shrub in spring and remind you how glad you are that winter is really over. Bears profusely enough to have one heck of a snowball fight. Large coarse old-fashioned rounded habit, popular in Maine for generations and in Europe for over 400 years. Dark green three-lobed maple-like foliage. Plenty of bright red berries for the birds. Excellent in borders. Easy to grow. Adaptable to a wide range of soils but happy in wet and even boggy spots. Flowers best in full sun. Susceptible to viburnum leaf beetle. Native to Europe, North Africa and northern Asia. **ME Grown.** (18-24")



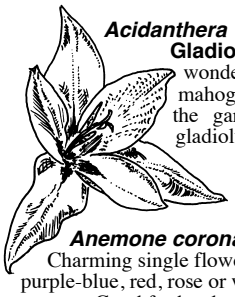
5940 Snowball Viburnum, $13.00

***Weigela florida* 'Courtalor' Carnival Weigela** 4-5' x 3-5' Tetraploid hybrid, France. Compact dense rounded slightly vase-shaped summer-flowering shrub that may arch to the ground. This recent introduction is nothing like any other Weigela. It features amazing multicolored red-pink-white tubular funnel-shaped azelea-like flowers. The whiter blossoms are edged in pink. Blooms for a month in late spring and early summer. The more sun, the more bloom. Will attract all the local hummingbirds. Forest-green foliage with yellow fall color. Excellent in borders and in groups but best as a specimen. Prune after it blooms. Prefers well-drained soil but thrives in most conditions, urban or rural. Genus native to eastern Asia. Z4 maybe Z3. (12-18" transplants)

5958 Carnival Weigela, $13.00

ME Grown = grown in Maine by a member of the Fedco growers coop

Tender Summer Bulbs are like fall-planted bulbs in that they give you an impressive floral display for comparatively little effort. Bulbs, corms and tubers store their energy which needs only some earth, moisture and sun to be released. Unlike fall bubs, they are not hardy in our climate. Energetic people lift and store them over the winter (details in the sidebar); the rest of us treat them as annuals. Each selection is offered in three different quantities; note the different item number for each package size.



Acidanthera murielæ **Fragrant Gladiolus** or **Ethiopian Gladiolus** produces sword-like foliage topped by wonderfully scented star-shaped 2" white flowers with mahogany-purple centers on arching stems. Beautiful in the garden or as a cutflower. 24" tall. Culture like gladiolus.

***6011**: 10 for $3.25*
***6012**: 20 for $5.50*
***6013**: 50 for $12.50*

Anemone coronaria **De Caen mix Anemone** or **Windflower**

Charming single flowers 1–3" wide are dark purple-blue, red, rose or white and appear in early summer. Good for borders, containers and cutting. 8–10" tall. Soak knobby tubers in water 24 hours before early-spring planting 1–2" deep, 4–8" apart. Anemones enjoy full sun and light sandy soil but must be kept moist during the growing season.

***6021**: 10 for $4.00*
***6022**: 20 for $6.75*
***6023**: 50 for $14.00*

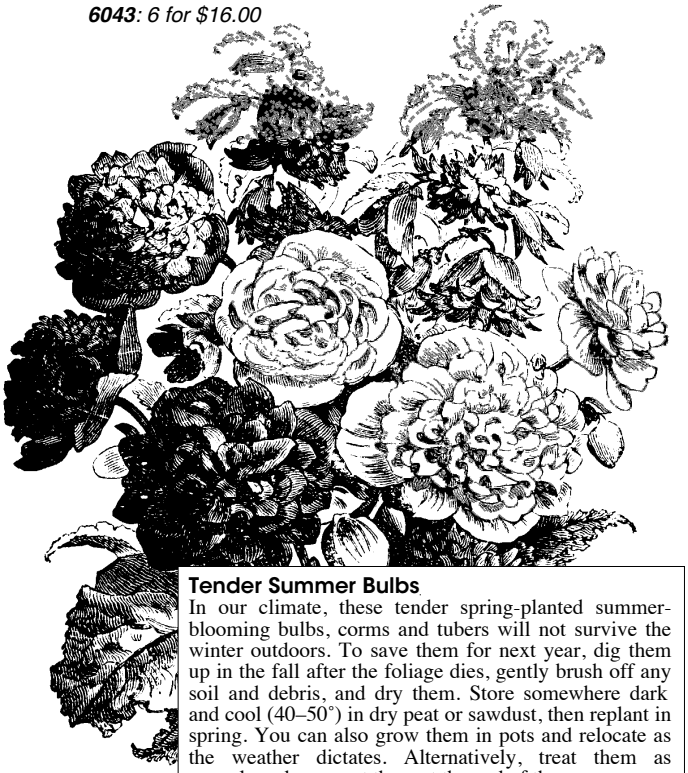
Begonia* x *tuberhybrida **Tuberous Begonia** Lush textures, intense colors and a tropical aura make this tender temperamental plant well worth cultivating. Velvety flowers bloom all summer, drooping languidly amidst red-tinted foliage. Excellent bedding or container plants. Best in a cool spot with lots of indirect sunlight and air circulation. The books say moist but not soggy fertile soil. I think they *love* moisture. I drench mine every day, feed heavily and stand back to ooh and aah! Plant tubers outside, concave side up, 1/2–1" deep and 12–15" apart when night temperatures rise above 50˚. For a longer season, start indoors and plant out later. Pinch back to encourage more blooms. These are Multiflora types, 12" tall. Big 2 1/2" tubers.

Pink Camellia

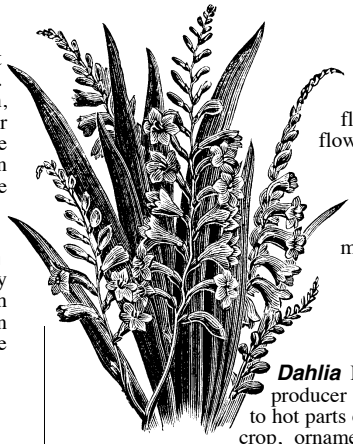
***6031**: 2 for $6.50* ***6032**: 4 for $12.00*
***6033**: 6 for $16.00*

Dark Red Camellia

***6041**: 2 for $6.50* ***6042**: 4 for $12.00*
***6043**: 6 for $16.00*



Tender Summer Bulbs
In our climate, these tender spring-planted summer-blooming bulbs, corms and tubers will not survive the winter outdoors. To save them for next year, dig them up in the fall after the foliage dies, gently brush off any soil and debris, and dry them. Store somewhere dark and cool (40–50˚) in dry peat or sawdust, then replant in spring. You can also grow them in pots and relocate as the weather dictates. Alternatively, treat them as annuals and compost them at the end of the season.



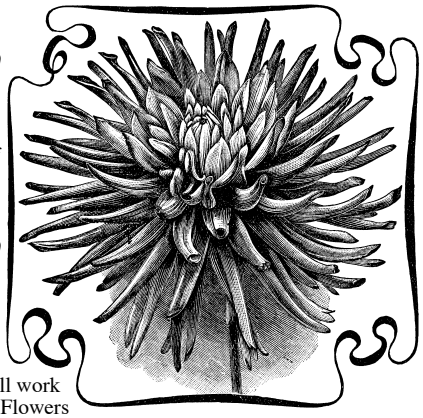
Crocosmia* x *crocosmiiflora **'Lucifer'** glows in the garden or makes a long-lasting cutflower. Midsummer sprays of bright red flowers opening from bottom to top on curving flower stalks look like bursts of flame above their gladiolus-like foliage. "Lucifer" means "light-bearing" and refers to the blossoms' resemblance to lighted matches. Grows well in pots. 24–36" tall. Plant 3" deep, 3" apart in moist well-drained soil.

***6051**: 5 for $4.00*
***6052**: 15 for $9.50*
***6053**: 30 for $17.00*

Dahlia Bushy bedding plant and prolific cutflower producer blooms from midsummer until frost. Native to hot parts of the Americas and first developed as a food crop, ornamental dahlias are descended from years of breeding and hybridizing *D. pinnata* and *D. juarezi*. Earl Waterman grew our mixes this year at his Roadtown Dahlia Patch in Shutesbury, MA. These are large tubers.

D. **Mystery Day** Large deep purple to burgundy-red flowers with white tips. Real knock-outs up to 6" across! 32–40" tall.

***6061**: 1 for $3.50*
***6062**: 3 for $9.00*
***6063**: 6 for $16.00*



D. **Park Princess** Cactus-type dahlia. Spiky pointed pink petals burst forth in a splendid display of 5" flowers. 24–26" tall.

***6071**: 1 for $3.50*
***6072**: 3 for $9.00*
***6073**: 6 for $15.50*

D. **Earl's Medium Mix** Earl assures us that this mix "will not disappoint" and "if you like bicolors, then you will like the choices." Lots of good sturdy plants that will work in a rock garden or border. Flowers run around 4–5" on plants ranging 2–3' tall.

***6081**: 2 for $4.90* ***6082**: 4 for $9.25*
***6083**: 8 for $16.00*

D. **Earl's Tall Mix** As popular as ever in its twelfth year on our list, includes pink, yellow, light purple, white, red and dark red 3–6" flowers, pompon and decorative (standard) styles. Plants 2–4' tall.

***6091**: 2 for $4.90* ***6092**: 4 for $9.25*
***6093**: 8 for $16.00*

Dahlia Grows best with 3–4 hours of direct sun per day, but will tolerate conditions from full sun to light shade. Plant 3–4" deep, 12–24" apart. Conventional wisdom says to plant after danger of frost is past, but our grower in Massachusetts plants his the same time as his peas. He believes early planting is important and says the plants will recover if the first foliage is killed by frost. Dahlias often need staking, but close plantings can support each other. Because dahlia blooms are susceptible to insect damage, especially in the bud stage, think out a control program ahead of time. Watch out for tarnish bugs, leaf hoppers and thrips. Frequently picking the flowers keeps some pests down.

***Gladiolus* Sword Lily** Showy summer bloomer excels as a cutflower. Each 36" tall stalk is covered with 10 or more open funnel-shaped flowers that bloom from bottom to top. Named for the their sword-like leaves; a *gladiolus* was a small Roman sword. Gladiolus bulbs are 1 1/2" and up.

G. 'Blue Tropic' deep lavender.
***6101**: 10 for $4.50* ***6102**: 20 for $7.75*
***6103**: 50 for $17.00*

***G.* 'Carmello'** rich golden-orange, very bright and showy.
***6111**: 10 for $4.50* ***6112**: 20 for $7.75*
***6113**: 50 for $17.00*

***G.* 'Mon Amour'** subtle pastel with peachy-pink throat, shading to yellow and cream.
***6121**: 10 for $4.50* ***6122**: 20 for $7.75*
***6123**: 50 for $17.00*

***G.* 'Nori'** violet-blue with prominent cream accent.
***6131**: 10 for $4.50* ***6132**: 20 for $7.75*
***6133**: 50 for $17.00*

***G.* 'Porterdale'** bright pink with lighter throat.
***6141**: 10 for $4.50* ***6142**: 20 for $7.75*
***6143**: 50 for $17.00*

***G.* 'Raven'** dark red with a suggestion of black.
***6151**: 10 for $4.50* ***6152**: 20 for $7.75*
***6153**: 50 for $17.00*

***G.* 'Traderhorn'** bright red with a thin cream line emerging from the throat.
***6161**: 10 for $4.50* ***6162**: 20 for $7.75*
***6163**: 50 for $17.00*

***G.* 'White Prosperity'** pure white, ruffled petals.
***6171**: 10 for $4.50* ***6172**: 20 for $7.75*
***6173**: 50 for $17.00*

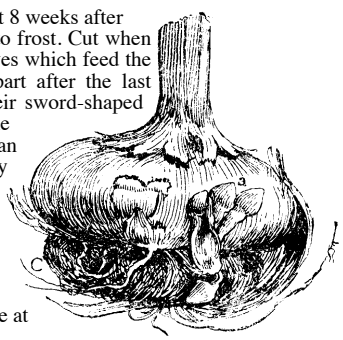
Large-Flowering Glad Mix
***6181**: 10 for $4.00* ***6182**: 20 for $5.50*
***6183**: 50 for $12.00*

Nanus Glad Mix miniature, mixed colors, many bicolors and butterfly-types, 24" tall. They're darling! Very satisfying clumped in a bed or as cuts. Some suppliers offer these as Hardy Glads, supposed to be hardy in Zone 5. I would not count on this without very good snow cover or other protection.
***6191**: 10 for $5.75* ***6192**: 20 for $9.50*
***6193**: 50 for $21.50*

***Ranunculus* Hybrids Mix** Orange, white, yellow, pink, or red flowers resemble big double buttercups and bloom from late spring into summer, Good for borders, pots and cutting. Fern-like foliage. 12" tall. When Ranunculus appears at the florist in late winter, I go nuts and completely forget my budget! Before planting, soak tubers in water for several hours to several days. They need drainage, but respond well to lots of moisture. Set 2–4" deep, 6" apart, claw side down.
***6201**: 6 for $4.25* ***6202**: 12 for $7.50*
***6203**: 24 for $13.00*

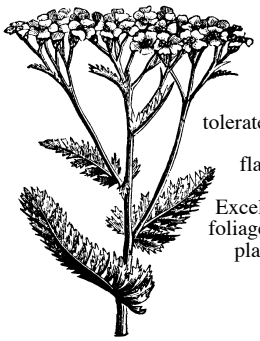
Gladiolus Each stalk blooms for about a week, about 8 weeks after planting. Stagger plantings for flowers from summer to frost. Cut when 2–3 flowers have opened, taking care to spare the leaves which feed the developing corm. Plant corms 4–6" deep and 6" apart after the last spring frost. Hilling or staking may be needed if their sword-shaped foliage and 3–4' flower spikes get top heavy. Dig up the corms after the tops have died, discard the old one, clean the new one, dry, and store loose (no peat) in a cool dry place.

Thrips are a problem for glads, and infestations—indicated by yellowing and spotted foliage—are aggravated by water stress. Be prepared lest they harm your plants and prevent flowering. Consider a control program—possibilities include insecticidal soap, garlic, pyrethrum or rotenone—to use at the first sign of infestation.



Herbaceous Perennial Plants

Most of the perennial plants we offer are hardy at least into Zone 4. USDA hardiness zone (chart on page 3) follows each description. See sidebar below for planting instructions. The list is alphabetized by botanical names, in italics, followed by common names. Each selection is offered in three different quantities; note the different item number for each package size.



***Achillea millefolium* 'Terra Cotta' Yarrow** *Terra Cotta* means 'baked earth' and that bright clay-flower-pot color predominates in this mix. All the dusky shades—coral, apricot, yellow and gold—evoke Tuscany or our Southwest. Yarrow tolerates most conditions, is untroubled by pests and is a stand-out in heat and drought. Long-lasting 3–4" flat-topped clusters of tiny flowers, corymbs, bloom from late June into August and attract butterflies. Excellent for fresh or dried arrangements. Silvery-grey foliage is finely cut and very good-looking. 18–36" tall, plant 12–24" apart in full sun, well-drained soil. Z3.

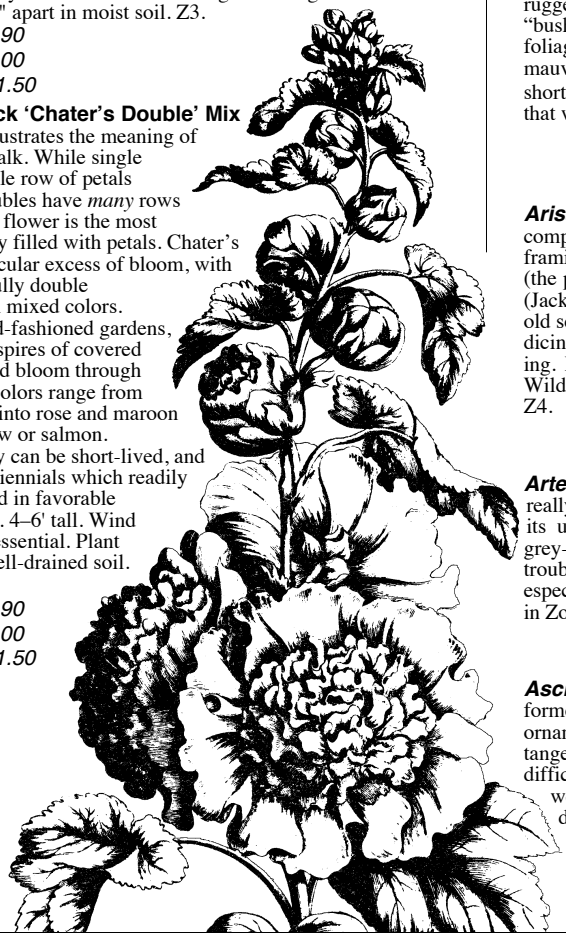
***6211**: 1 for $4.00*
***6212**: 3 for $10.50*
***6213**: 6 for $19.50*

***Aconitum napellus* English Monkshood** or **Friar's Cap** produces dense showy spikes of deep violet-blue helmet-shaped flowers above elegant palmate foliage in late summer. Plant in a partially shaded, cool and moist location for longest-lasting flowers. An excellent cutflower—cut when 1/3 to 1/2 the spike is in bloom. Grand delphinium-style blooms rarely need staking. I love watching bumble bees climb under the hood and completely disappear into the flowers then clamber back out again covered with pollen. The entire plant is poisonous; wash your hands after handling or cutting. 36–40" tall. Plant 15–20" apart in moist soil. Z3.

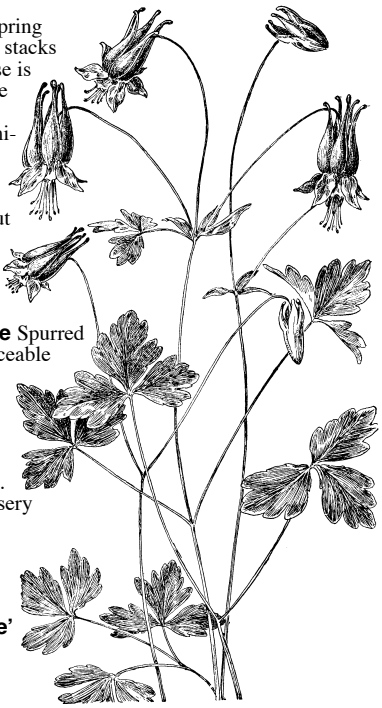
***6221**: 1 for $2.90*
***6222**: 3 for $7.00*
***6223**: 6 for $11.50*

***Alcea rosea* Hollyhock 'Chater's Double' Mix** Our offering this year illustrates the meaning of **fully double** in garden-talk. While single flowers have, yes, a single row of petals around their centers, doubles have *many* rows of petals. A fully double flower is the most extravagant, being totally filled with petals. Chater's Double provide a spectacular excess of bloom, with its assortment of large fully double hemispherical flowers in mixed colors. Self-sowing staple of old-fashioned gardens, hollyhocks produce tall spires of covered with flowers for extended bloom through July and August. Their colors range from white through the pinks into rose and maroon with an occasional yellow or salmon. Officially perennial, they can be short-lived, and are best cultivated as a biennials which readily self-sow once established in favorable conditions. Like full sun. 4–6' tall. Wind protection or staking is essential. Plant 12–18" apart in moist well-drained soil. Z3.

***6231**: 1 for $2.90*
***6232**: 3 for $7.00*
***6233**: 6 for $11.50*



***Aquilegia* Columbine** In early spring round-lobed leaves emerge as little stacks which unfurl prettily when little else is green. Not long after, flowers dance above the foliage on vertical stems displaying their characteristic prominent five spurs. Good for a cutting garden or border. Foliage dwindles in summer heat to make room for late-bloomers. Tolerates full sun but prefers partial shade which prolongs the flowering season. Plant in light soil with adequate humus, moisture and drainage. Z3.



***A. canadensis* Wild Columbine** Spurred red flowers are highlighted by noticeable bright yellow stamens which hang below the petals and "give a jewel-like effect," as Marilyn Dwelley says in her *Spring Wildflowers of New England*. Self-sows in my dooryard and brightens our springs. 12–24" tall, plant 8–12" apart. Nursery propagated.

***6241**: 1 for $4.00*
***6242**: 3 for $10.25*
***6243**: 6 for $18.00*

***A. flabellata* 'Black Currant Ice'** Species known as Fan Columbine, rugged naturally dwarf plants have "bushy" well-branched blue-green foliage. Pretty bicolor features mauve-purple outer petals with creamy (think vanilla) interior petals and short spurs. Holly, my new assistant, found this in a catalog and we agreed that we had to try it! Plant 6–12" apart, 6–12" tall.

***6251**: 1 for $3.75* ***6252**: 3 for $9.50*
***6253**: 6 for $17.25*

***Arisaema triphyllum* Jack-in-the-Pulpit** In midspring one or two compound leaves emerge close to the ground, each with three leaflets framing an upright stem topped by a tannish-purple 3" long cuplike spathe (the pulpit) which contains and arches over the erect greenish-yellow spadix (Jack). It's a great pleasure, one I still remember, for the two- or three-year-old set to lift the flap and see Jack. Native Americans used the dried root medicinally, but calcium oxalate crystals in the fresh plant are intensely irritating. Easy to grow in moist woodsy soil with plenty of humus and shade. Wildflower native to the eastern U.S. About 12" tall. Nursery propagated. Z4.

***6261**: 1 for $3.50* ***6262**: 3 for $9.00*
***6263**: 6 for $16.00*

***Artemisia dracunculus* var. *sativa* 'Tarragon' French Tarragon** really is culinary tarragon, the flavoring with a hint of anise well known for its use with vinegar, salads, poultry and fish. Bushy, with long narrow grey-green leaves, looks like a small shrub. Mine provided years of trouble-free performance and culinary pizzazz. 18–40" tall. Easy to grow, especially in poor dry soil, full sun. Needs good drainage. Some, especially in Zone 4, use a winter mulch. Z5/4.

***6271**: 1 for $4.25* ***6272**: 3 for $10.50*
***6273**: 6 for $19.00*

***Asclepias tuberosa* Butterfly Weed** Also known as **Pleurisy Root** and formerly used by American natives for lung trouble. Now recognized as an ornamental native plant that attracts butterflies and provides bright tangerine-orange flowers in 5" clusters from midsummer into fall. May be difficult to establish because it has a fleshy taproot that demands well-drained fertile sandy soil and does not like to be disturbed. Breaks dormancy late but, once established, very rugged and easy to care for. 24" tall, plant 18–24" apart in full sun. Z4.

***6281**: 1 for $4.50* ***6282**: 3 for $11.50*
***6283**: 6 for $20.00*

Bare-Root Perennial Plants

Treat bare-root perennials like tender annuals for their first growing season, when they typically focus on root growth. Once established, usually in the second year, they are vigorous and floriferous.

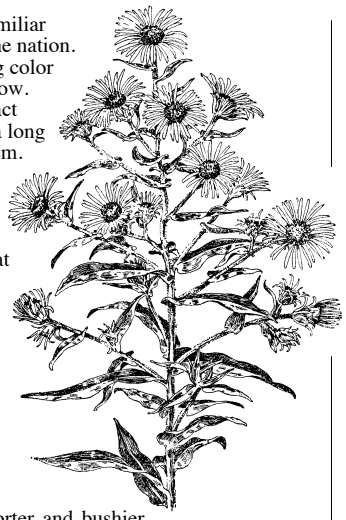
When you receive your order, open the bags and check the stock immediately. Roots and crowns should be firm and pliable, not soft or brittle. If they are slightly dry, add a little water or, if they are going to be potted up soon, soak the roots. Generally, a little surface mold is harmless and will not affect the plant's future performance. If you cannot pot them up immediately, store them in a cool (35–40°) location for a short time.

Pot up the rootstock in well-drained potting mix. Most plants need a deep 6" pot or a 1-gallon container. Avoid coiling the roots in the bottom of undersized containers. Grow newly potted perennials for a few weeks in a protected location in indirect light at 50-60° and keep from freezing. Wet and/or cold conditions for an extended period may cause rotting. Begin feeding when new growth appears. Keep dry fertilizers away from plant crowns. Use animal manures with caution as they can promote fungal and bacterial diseases.

Transplant outside once they show some top growth and the danger of frost has passed. Dig a hole about twice the size of the pot, loosening the surrounding soil and adding compost or fertilizers as necessary. Generally, plant the top of the crown just below ground level, less than an inch from the surface of the soil.

Nearly all perennials appreciate a fall mulch and a sidedressing of compost or leaf mold in the spring.

Aster **Starwort** or **Frost Flower** are familiar summer and fall wildflowers throughout the nation. These varieties are selected for outstanding color and form but are still robust and easy to grow. Flowers provide great displays in fall, attract butterflies and beneficial insects, and last a long time in the vase. Deer don't usually eat them. Plant singly, group in a border, or naturalize in meadows or on banks. Cut back slightly in early-mid June to induce an abundance of 1½–2" rayed blooms from late August into October. Asters are at their peak when most plants have faded. Plant 12–18" apart in light moist humusy soil in full sun with good air circulation. Z4.



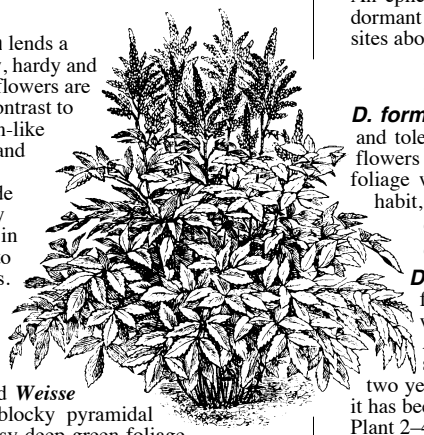
A. novae-angliae **'Alma Potschke'** Surprising wonderful intense salmon-rose. One of my favorites. 30–36" tall.

6291*: 1 for $4.50*
6292*: 3 for $11.50*
6293*: 6 for $20.50*

A. oblongifolius **'October Skies'** Shorter and bushier than our New England asters but with larger flowers. Grows as a low mound of aromatic foliage covered in lavender daisy-like flowers with yellow centers. 15–18" tall.

6301*: 1 for $4.50* ***6302****: 3 for $12.00*
6303*: 6 for $21.50*

Astilbe **Feather Flower** or **False Spirea** lends a novel touch to the border and is easy to grow, hardy and long-lived. Long-lasting plumes of feathery flowers are good for drying and provide an interesting contrast to more ordinary petaled blossoms. Elegant fern-like foliage forms an attractive clump all season and comes in a wide range of sizes and shades. Convention holds Astilbe to be a partial-shade plant that absolutely requires a moist humusy acid soil when grown in full sun. That's true in warmer areas, but in central Maine it seems to tolerate full sun in a wide range of conditions. Blooms July and August. Said to be deer-resistant. Stock has 2–3 "eyes." Plant 12–18" apart and divide clumps every few years. Z4.



A. **x** ***arendsii*** **'White Gloria'** Also called ***Weisse Gloria***. Snow white flowers form dense blocky pyramidal plumes contrasting beautifully with the glossy deep green foliage. Does well in the garden or containers. Midseason. 25–28" tall.

6311*: 1 for $3.00* ***6312****: 3 for $8.00*
6313*: 6 for $13.00*

A. chinensis **'Visions'** Raspberry-red plumes are sweetly fragrant. Large true-green foliage forms a robust clump. Drought-tolerant variety does not require moist soils. 14–16" tall

6321*: 1 for $3.00* ***6322****: 3 for $8.00*
6323*: 6 for $13.50*

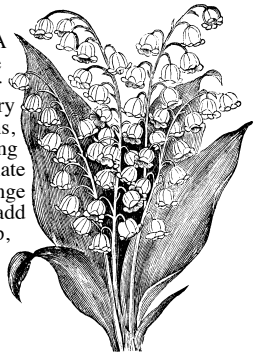
A. japonica **'Montgomery'** Intense red plumes on darker red stems, one of the best reds. Foliage emerges reddish-bronze and turns dark green. Mid to late season. 20–24" tall.

6331*: 1 for $3.00* ***6332****: 3 for $8.00*
6333*: 6 for $13.50*

A. thunbergii **'Ostrich Plume'** Also called ***Straussenfeder***. Large open coral-pink flowers have a distinctive arching drooping habit. New foliage bronze-tinted. Late season. 30–40" tall.

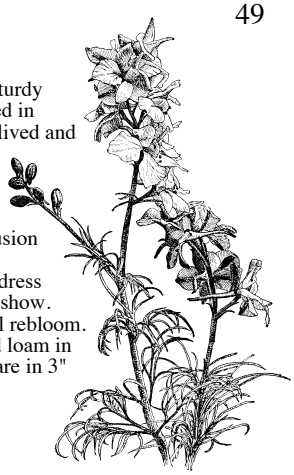
6341*: 1 for $3.00* ***6342****: 3 for $7.50*
6343*: 6 for $12.50*

Convallaria majalis **Lily of the Valley** A top-seller for all the many years that we've listed it. Makes a hardy bedding or border plant and an excellent ground cover, even in dry shady areas. Easy to grow under any conditions, but prefers partial to full shade. Produces long stems of bell-shaped fragrant white flowers in late spring-early summer, followed by small orange berries. Intense fragrance and delicate shape add welcome notes to bouquets. Plant pips 2" deep, 3–5" apart in rich moist soil. 6–8" tall. Z2.



6351*: 5 for $4.25*
6352*: 10 for $7.50*
6353*: 25 for $16.00*

Delphinium **'Magic Fountains' mix**
Delphinium No staking needed for these sturdy early-summer 28–36" spikes densely covered in flowers. The Magic Fountain series is long-lived and easier to grow than the big delphiniums, making it a wonderful choice for small gardens. My blue one is over 7 years old now and makes a bigger show every summer, now rivaling the big ones for profusion of lavish flowers. Mix includes white, pink, lavender, lilac, sky blue and dark blue. Sidedress lightly in early, mid and late spring for best show. Remove spent flowerstalks to encourage fall rebloom. Plant 12–24" apart in highly fertile non-acid loam in full sun or light shade. Our plants this year are in 3" plugs. Z3.



6361*: 1 for $3.90*
6362*: 3 for $9.75*
6363*: 6 for $17.50*

Dicentra **Bleeding Heart** Graceful racemes arch over clumps of attractive cut foliage. Distinctively shaped flowers dangle in a row on each raceme like charms on a bracelet. Hardy long-lived plant when it gets rich moist soil and partial shade. Z3.

D. cucularia **Dutchman's Breeches** White yellow-tipped flowers look like so many tiny pantaloons hanging above very finely cut foliage. Blooms with the daffodils and makes a wonderful accent in an early spring garden. An ephemeral: whole plant dies down after flowering; little tubers remain dormant until the following spring. Native eastern wildflower, rescued from sites about to be developed and nursery propagated. 8–12" tall.

6371*: 1 for $3.25* ***6372****: 3 for $9.00*
6373*: 6 for $16.00*

D. formosa **'Luxuriant' Western Bleeding Heart** Blooms all summer and tolerates heat and drought better than any other *Dicentra*. Cherry red flowers defy the elements as they dangle above lush finely cut light green foliage which is pretty as a fern's. Excellent border plant with spreading habit, 12–15" tall.

6381*: 1 for $4.50* ***6382****: 3 for $11.75*
6383*: 6 for $21.50*

D. spectabilis **Old-Fashioned Bleeding Heart** Old garden favorite delights every spring with pink heart-shaped flowers with white detail. Blooms with late tulips and complements them well. Also useful for cutting. Prefers plenty of room to bush out. Mine surprised both me and its neighbors when it became over 6' wide in two years. I moved it rather unceremoniously to a less hospitable spot and it has been manageable ever since. Foliage tends to die back in summer heat. Plant 2–4" deep, 24" apart. 30–36" tall. Our stock has 2–3 eyes.

6391*: 1 for $3.50* ***6392****: 3 for $8.25*
6393*: 6 for $14.50*

D. s. Alba **White Bleeding Heart** Every bit as charming as the pink bleeding heart, Alba has chains of *white* heart-shaped flowers that dangle beneath the arching leafless stems. Forms large bushy clumps of light green foliage. Plant 2–4" deep, 24" apart. 30–36" tall. Our stock has 2–3 eyes.

6401*: 1 for $3.75* ***6402****: 3 for $8.50*
6403*: 6 for $15.00*

Digitalis Foxglove Pendulous bell-shaped flowers with spotted throats dangle along 2–5' spires. Basal rosette of big velvety leaves. Flowers June through August. Good for cutting or border. Moist slightly acid soil in full sun to partial shade. Z3.

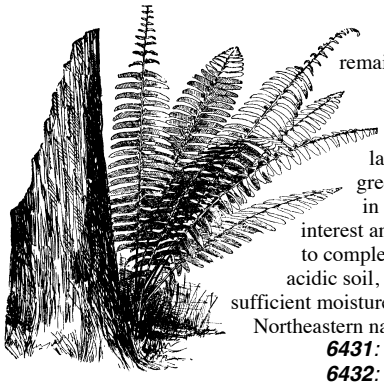
***D.* x *mertonensis* Strawberry Foxglove** Copper-tinged strawberry-rose 2½" flowers adorned with pink and white spotted throats. 3–4' spires. Large true-breeding tetraploid hybrid needs dividing every 3 years. Plant 24–36" apart.

***6411**: 1 for $4.50* ***6412**: 3 for $11.50*
***6413**: 6 for $19.75*

***D. grandiflora* 'Carillon' Foxglove** True perennial foxglove. Low-growing plant bears creamy yellow flowers that are intricately marked with brown flecks on the inside. Holly is especially fond of these—for their soft colors and their rugged hardiness. Plant 12" apart, 12–15" tall.

***6421**: 1 for $4.50* ***6422**: 3 for $11.50*
***6423**: 6 for $19.75*

Ferns are flowerless spore-producing perennials represented by over 10,000 species worldwide, ranging from 70' tropical tree ferns to teeny plants sprouting from cracks in alpine rock. In Maine we enjoy lush fern displays all summer on the roadsides and in the woods. More and more people are using ferns as foundation plantings and in all kinds of shaded spots. Ferns make wonderful low-maintenance foliage plants that thrive in moist woodsy humus-rich soil and lend a serene aura to a shady garden or landscape. Mulch if necessary to keep crowns from drying out.

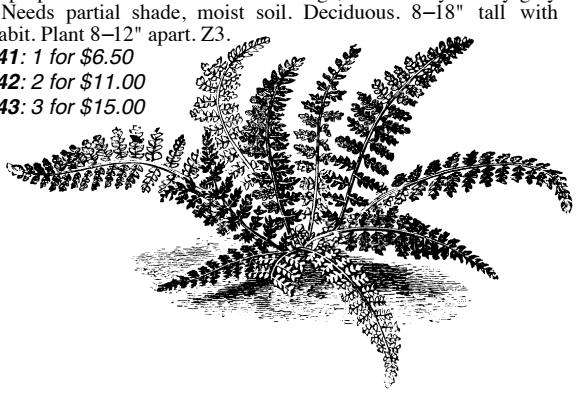


Christmas Fern *Polystichum acrostichoides* remains evergreen in warmer zones, where it's widely used for Christmas cut greenery. Shuttlecock of fronds with ladder-like parallel leathery dark green leaves is partially evergreen in our climate. Provides good fall interest and emerges in very early spring to complement woodland flowers. Moist acidic soil, light shade, tolerates sun given sufficient moisture. Plant 2–3' apart. 18–24" tall. Northeastern native. Z3.

***6431**: 1 for $3.90*
***6432**: 3 for $10.00*
***6433**: 6 for $18.50*

Japanese Painted Fern *Athyrium niponicum* 'Pictum' The most decorative fern I know and surprisingly rugged for such a fancy plant. The Perennial Plant Association's Plant of the Year for 2004. Soft grey-green background with purplish wine-red stems and markings, accented by silvery-grey highlights. Needs partial shade, moist soil. Deciduous. 8–18" tall with spreading habit. Plant 8–12" apart. Z3.

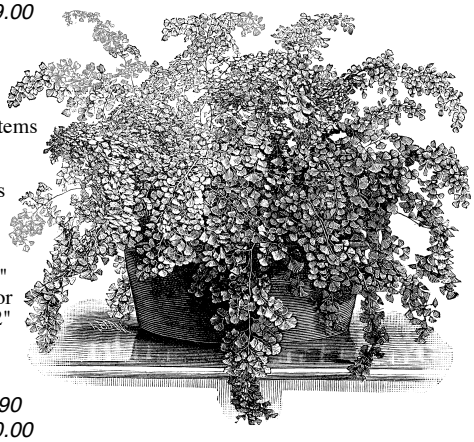
***6441**: 1 for $6.50*
***6442**: 2 for $11.00*
***6443**: 3 for $15.00*



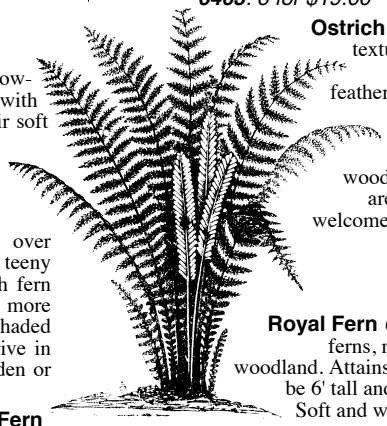
Lady Fern *Athyrium filix-femina* Graceful bright green fronds are twice compound with very numerous leaflets resulting in a fine-textured classic fern appearance. Many variant forms, a few taller than 4' but most are under 2'. Works as a foundation planting on the shady sides of my house. Spreads easily from falling spores in moist soil. Tolerates more sun and drier soil than most ferns. Z3.

***6451**: 1 for $3.90* ***6452**: 3 for $10.00*
***6453**: 6 for $19.00*

Maidenhair Fern *Adiantum pedatum* Delicate whorled form makes it one of my favorites. Glossy black stems curve up and then droop toward the ground with more narrow black stems growing in arches from them. Tiny distinct ginkgo-like green leaves line every stem. Plant 12" apart. Likes semi-shade or shade, moist soils. 10–12" tall. Native to eastern North America. Very hardy. Z2.



***6461**: 1 for $3.90*
***6462**: 3 for $10.00*
***6463**: 6 for $19.00*

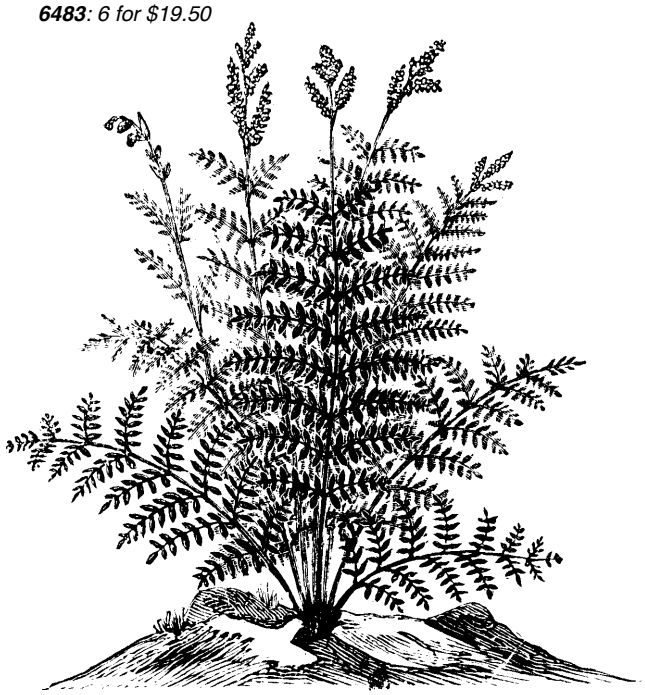


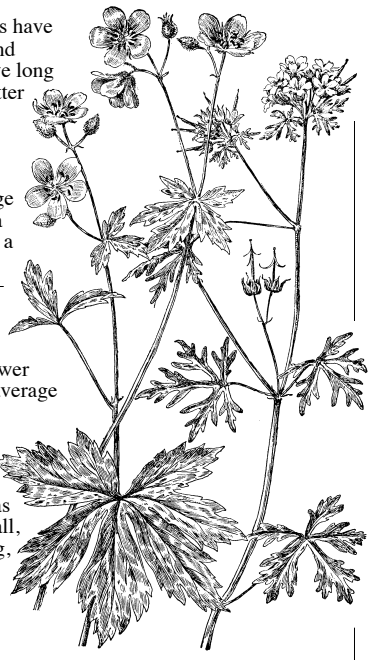
Ostrich Fern *Matteuccia struthiopteris* A delicately textured bright green deciduous fern with a golden hue in the light. Frond tips curl like ostrich feathers. One of the largest hardy ferns, 3–7' tall, and spreads by underground runners, so give it room. Always popular and our best-selling fern for the last 3 years. Likes open shade, woods and wet banks. Tolerates full sun in swampy areas. Native to Europe, but well established and welcome in North America. Z2.

***6471**: 1 for $4.25*
***6472**: 3 for $11.50*
***6473**: 6 for $19.50*

Royal Fern *Osmunda regalis* One of the showiest garden ferns, makes a great focal point on a waterside or in a woodland. Attains giant proportions. Slow-growing plant gets to be 6' tall and over 9' wide in humus-rich moist-to-wet soil. Soft and wavy deciduous lance-shaped light green fronds can reach 3' long. Sometimes called **Flowering Fern** because some of the fronds have brown spore cases on their tips which lend a decorative tassel-like appearance. Evolutionarily speaking, *Osmunda* is one of the oldest plant genera, native to North and South America and Asia. Some royal fern individuals are said to be 1000 years old. Ours are much younger. Z3.

***6481**: 1 for $4.25* ***6482**: 3 for $11.50*
***6483**: 6 for $19.50*





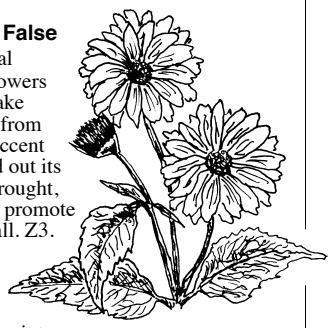
***Geranium* Cranesbill** True geraniums have deeply cut leaves, clusters of single round cup-shaped to flat flowers and distinctive long narrow "cranesbill" seedpods which flutter jauntily above the spreading foliage. Longevity, hardiness, lo-o-ng flowering period and attractive foliage make them useful for borders, edging or rock gardens. Very good groundcover. Foliage quickly forms dense clumps, and turns a rich red in fall. Name confusion may be a big reason why this attractive easy-to-grow genus is not more popular: the tender bedding and indoor plant with big red flowers often called geranium is actually *Pelargonium*. These true geraniums tolerate partial shade, but flower more in full sun. Plant 12–18" apart in average garden soil. Z4.

***G. cinereum* 'Ballerina'** Profuse pink flowers with dark purplish-red veins and eyes dance atop grey-green foliage. Up close, each one is as pretty as a tutu. Mounded dwarf variety 6–12" tall, very compact and long-blooming, perfect for rock gardens and edges.

***6491**: 1 for $4.50*
***6492**: 3 for $12.00*
***6493**: 6 for $21.00*

***G. pratense x clarkei* 'Brookside'** Vigorous, lush and very long blooming. Sapphire-blue flowers with creamy white centers. Forms a compact mound and foliage turns vivid shades of red-orange in autumn. 20–24" tall.

***6501**: 1 for $4.50* ***6502**: 3 for $11.75*
***6503**: 6 for $20.50*



***Heliopsis helianthoides* 'Summer Sun' False Sunflower** Great for wild places and informal borders. Semi-double bright golden-yellow flowers are 3" across on long sturdy stems, so they make excellent cuts. Durable and showy, blooming from July through September. Plant it alone as an accent or with other vigorous perennials lest it crowd out its neighbors. Likes full sun and heat, tolerates drought, especially with adequate humus. Deadhead to promote continuous blooms. Plant 24" apart, 24–36" tall. Z3.

***6511**: 1 for $2.90*
***6512**: 3 for $8.50*
***6513**: 6 for $15.00*

***Hemerocallis* Daylily** Champion low-maintenance perennial produces a bush of narrow arched leaves topped with lily-shaped flowers from July to September. *Hemerocallis* means *beautiful day*, referring to the fact that each flower lasts only a day, but since each scape (or stem) is covered with buds, bloom periods can be extensive and the long stems work well in bouquets. Very hardy, flourishes under a wide range of conditions, from full sun to shade, wet to dry. Trouble-free, chokes out weeds. For foundation planting, terrace, brookside, border or wild garden. Plant 12–18" apart in average soil; benefits from a shovel or two full of compost.

Once again we are delighted to list varieties from Lew Purinton, Somerville, ME, gardener and daylily collector *extraordinaire*. This year I visited Lew's gardens in the rain as our web photos indicate. Under grey skies the colors were more vibrant than ever. June and July were ridiculously cold and wet but the *Hemerocallis* thrived—plants even bushier than usual. Lew and I chose a wide range of colors for this years offerings. Thanks to organic lemon lilies from Wini and Pete Noyes of Thorndike, this year all our daylilies are **ME Grown**! Supplies may be limited; order early. Z2.

***H. flava* Lemon Lily** or **Custard Lily** When you see the first daylilies of the season blooming by old houses, they're probably yellow and probably lemon lilies. Clear bright yellow star-shaped flowers. Old variety with a lemony floral scent. 24" tall. MOFGA-certified organic. **ME Grown.**

***6521**: 1 for $4.50*
***6522**: 3 for $11.50*
***6523**: 6 for $20.00*

***H.* 'Ed Murray'** Intense purple-maroon coloring becomes even darker at the slightly ruffled edges. Bright yellow-green throat highlights the color and zings into a tiny yellow stripe on the three inner petals. A tall knockout at 40–48". **ME Grown.**

***6531**: 1 for $3.75* ***6532**: 3 for $9.00*
***6533**: 6 for $16.00*

***H.* 'Karen Sue'** Lew's wife is named Karen and her sister is Sue so Lew bought this one sight-unseen. Turned out to be a good investment and not just in family togetherness. Inner petals are bright rosy-pink with a light peachy throat and stripe. Outer petals are peachy pink. The whole effect is showy, pretty and fun. 24–30" tall. **ME Grown.**

***6541**: 1 for $4.25*
***6542**: 3 for $11.25*
***6543**: 6 for $19.75*

***H.* 'Mauna Loa'** Photos and descriptions don't capture the glowing aura of this ER Roberts introduction. Bright orange centers glow like active craters and, as the lava cools, progress to tawny orange petals which darken enough at the edges to be called russet. A tall and fascinating cultivar. 40–48" tall. **ME Grown.**

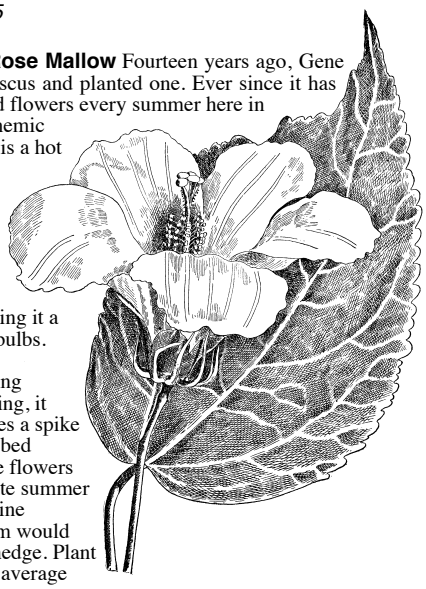
***6551**: 1 for $3.75*
***6552**: 3 for $9.00*
***6553**: 6 for $16.00*

***H.* 'Red Volunteer'** Haunting marvelous red that isn't true red and isn't maroon but a rich dusky shade on both the wide outer petals and narrower inner petals. Throat is orangey-yellow. 30–36" tall. **ME Grown.**

***6561**: 1 for $4.25*
***6562**: 3 for $11.25*
***6563**: 6 for $19.75*

***H.* 'Twist of Lemon'** Just as a twist accentuates a tall frosty drink, this tall Twist of Lemon would set off almost any display. Narrow clear light lemon-yellow petals are bright and refreshing. Very vigorous and floriferous, continues the yellow display long after the lemon lilies are finished. 36–40" tall. **ME Grown.**

***6571**: 1 for $4.25* ***6572**: 3 for $11.25*
***6573**: 6 for $19.75*



***Hibiscus moscheutos* Rose Mallow** Fourteen years ago, Gene had the foresight to list hibiscus and planted one. Ever since it has provided tropical foliage and flowers every summer here in central Maine. Sales were anemic back then, but now hibiscus is a hot item in the northern nursery trade. Though native to southern swampy margins and meadows, tolerates dry soil once fully established.

Glorious vigorous tall plant, hibiscus is one of the last to appear in spring, making it a good companion for spring bulbs. Since it emerges so late, be careful not to root it out during spring cleanup. After emerging, it grows like crazy and becomes a spike covered with large deeply lobed velvety leaves and big single flowers that start blooming mid to late summer and go until frost. Makes a fine specimen and several of them would create an amazing summer hedge. Plant 18–24" apart in full sun and average garden soil.

***H. m.* 'Lord Baltimore'** Lord Baltimore's flowers are brilliant deep red and dinner plate-sized, up to 10" across with overlapping petals. 4–5' tall. Z4.

***6581**: 1 for $5.90* ***6582**: 2 for $10.50*
***6583**: 3 for $14.75*

***H. m.* 'Turn of the Century'** Alternating dark red to light pink petals give the 7" flower the appearance of a pinwheel. 6–8' tall. Z5.

***6591**: 1 for $6.90* ***6592**: 2 for $13.00*
***6593**: 3 for $18.00*

Hosta has bold foliage in orderly mounds with dependable sprays of fragrant bell-shaped flowers on tall stalks. Valuable and cherished low-maintenance border plant provides shade-loving ground cover spring to frost. Formerly called **Plantain Lily** or **Funkia** but I have never heard either used. A friend described them as "so architectural!" With their varying colors, textures and clump sizes, hostas alone under trees can make a woodland garden. Hostas tolerate a wide range of soil conditions, but need moisture. Those with blue and variegated leaves develop best color in shade. Deep shade gives fewer flowers. Plant 2–4' apart in rich soil with adequate humus. Divide every 4–5 years, or disturb clumps as little as possible; they improve with age as they spread and establish. Z3.

H. **'Abiqua Moonbeam'** Large blue-green round leaves with corrugated texture have irregular chartreuse margins so wide they sometimes nearly reach the midrib. Sport of August Moon and accompanies it beautifully. Topped with lavender flowers on 20–30" scapes. Great substance, 27"-tall clumps grow fast and become very wide.

6601*: 1 for $6.25* ***6602****: 2 for $11.00*
6603*: 3 for $15.00*

H. **'August Moon'** Large rounded golden puckering leaves stay attractive all summer in the sun; or let it light up the shade garden. White flowers touched with lavender. 20-32" tall.

6611*: 1 for $3.50* ***6612****: 3 for $8.00*
6613*: 6 for $14.50*

H. **'Deja Blu'** Leaves are blue-green in the center with a white lightning bolt dancing between the center and the yellow-green margins. Longtime Trees worker Laura Childs loves this one and recommends it as really tri-colored and a vigorous variety. Light lavender flowers on 20" scapes above a 16" clump.

6621*: 1 for $8.75* ***6622****: 2 for $17.00*
6623*: 3 for $23.00*

H. **'Halcyon'** A favorite mid-sized blue with frosty blue-green pointed leaves that have very good substance and resist slugs. Clumps become amazingly wide but remain around 22" tall. Pale blue-violet flowers reach to about 28".

6631*: 1 for $4.50* ***6632****: 3 for $10.50*
6633*: 6 for $19.00*

H. **'June'** On a garden visit last year, seed purchaser Nikos picked 'June' as a winner. No wonder: it was Hosta of the Year in 2001! Irregular blue-green margins surround a lighter center, chartreuse in spring, turning yellow-gold in summer. The blue-green and yellow overlap and streak most attractively, Pale lavender-blue flowers on 20" scapes. Clumps around 15" tall.

6641*: 1 for $8.50*
6642*: 2 for $15.00*
6643*: 3 for $21.00*

Iris sibirica **Siberian Iris** produces delicate flowers in late June on thin stems excellent for cutting. Tall slender foliage looks good all summer. Tolerates most conditions, but performs best in rich moist acid soil. Plant 12–15" apart in full sun or partial shade. Give them room to spread, and divide clumps every few years.

When, at age 86, renowned Maine iris breeder Dr. Currier McEwen began to scale back his operation, Steve Jones was privileged to dig a large portion of McEwen's collection for his Fieldstone Gardens in Vassalboro. We are delighted that Steve is supplying us again from that collection. Z3.

I. s. **'Harpswell Snowburst'** Not white but violet blue with a remarkable large round stippled white blaze resembling a snowburst. The blue of both standards and falls evokes a bright winter sky and the falls are edged with a delicate white rim. McEwen introduction, 1991. 36" tall. **ME Grown.**

6651*: 1 for $5.00* ***6652****: 3 for $14.00*
6653*: 6 for $25.00*

I. s. **'Ruffled Velvet'** Dark reddish-purple standards are fancily feathered standing above velvety flaring ruffled falls that are even darker purple with a gold and black blaze. Vigorous tetraploid. McEwen intro, 1973. 24–30" tall. **ME Grown.**

6661*: 1 for $4.00* ***6662****: 3 for $11.00*
6663*: 6 for $19.00*

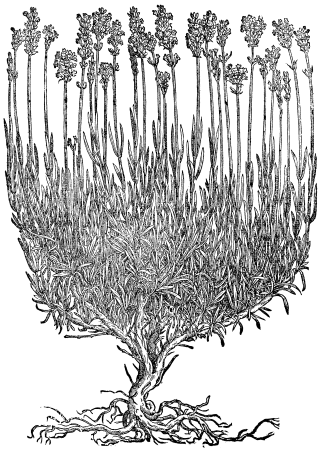
Currier McEwen

At Seaways Gardens, overlooking the sound in S. Harpswell, ME, around 1968 Currier McEwen crossed two blue Siberian irises and got some yellow offspring. He selected 'Butter and Sugar', the first yellow Siberian ever registered with the American Iris Society, establishing him both as bitten by the hybridizing bug and as a respected iris breeder.

Around that time McEwen retired to Seaways and to decades of serious hybridization where every year he made thousands of crosses and introduced 3–6 new iris cultivars, including many familiar ones like 'Ruffled Velvet' and 'Orville Fay'. He worked on daylilies as a sideline. By age 91, he was crossing "only" 400 per year.

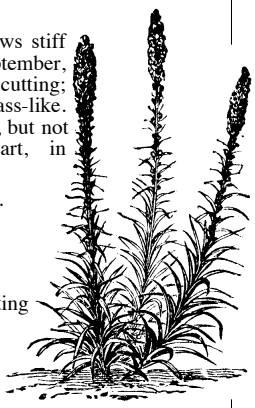
Incredibly, plant breeding was a hobby. Born in 1902, he was a physician, developed the specialty of rheumatology, and was the youngest person ever to be a dean of the NYU School of Medicine. In 1939 he met with Albert Einstein arranging to help several Jewish doctors leave Germany. After his "retirement" to Maine he maintained a medical practice in Brunswick.

He died at 101 and was said to be an old man for only three weeks of his life. Those who knew him praise the way he found time to share his bright, optimistic, welcoming, indomitable spirit with everyone he met.



***Lavandula angustifolia* Lavender 'Munstead'** Spires of lavender-blue 15–18" tall flowers treasured for their scent. Valued for dried arrangements, potpourri and herb bundles, lavender's aroma soothes the nervous system and perfumes the linen closet. Blooms all summer. Aromatic grey-green lanceolate foliage, bushy habit. Makes a nice border, rockery, slope, edging or specimen plant. Prune woody stems in spring. Likes full sun; demands good drainage. Plant 12–18" Z4.

***6671**: 1 for $4.50*
***6672**: 3 for $11.50*
***6673**: 6 for $20.00*



***Liatris spicata* Blazing Star** or **Gayfeather** grows stiff dense "bottlebrush" flower spikes, from July to September, which open from the top down. Flowers are good for cutting; leave 1/3 of stem on plant. The foliage is fine and grass-like. Hardy, tolerates a broad range of growing conditions, but not drought. 20–30" tall. Plant 3" deep, 8–12" apart, in well-drained fertile soil. Z3.

***L. s.* Blazing Star** "Regular" liatris, magenta-purple.

***6681**: 10 for $2.75*
***6682**: 20 for $4.75*
***6683**: 50 for $10.00*

***L. s.* 'Floristan White'** White makes an interesting addition to dried arrangements.

***6691**: 10 for $3.75*
***6692**: 20 for $6.50*
***6693**: 50 for $15.50*

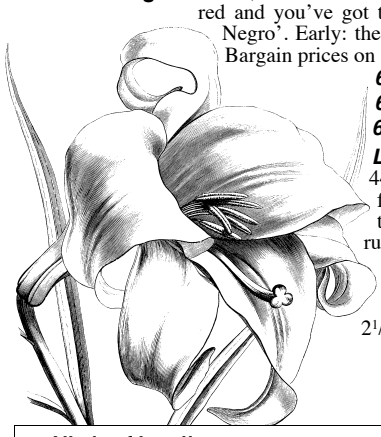
***Lilium* Lilies** Queen of the perennial border, fabulously showy and surprisingly easy to grow. Breeders have been working on them for thousands of years and continue to develop scores of new cultivars every year. It's confusing terrain, but briefly: **Asiatic** types bloom early, are a bit smaller (under 4') than Orientals and often have their star-shaped blossoms facing upward. **Oriental** strains tend to be taller (may need staking) and bloom later, with their very fragrant and flamboyant blossoms slightly pendant on tiny stems off the main stem.

Excellent as bedding plants or cutflowers, good as specimens or in solid masses. Lily leaf beetle may be a problem in your area. See sidebar for some details. Light shade prolongs summer blooms and keeps the bulbs cool. Mulch in full sun. Plant bulbs 6–8" deep, 6" apart in rich well-drained soil, slightly acid with good humus content. Z3.

***L.* 'Cancun'** Asiatic, 44–48" Golden-yellow with burnished with orangey-bronze petal tips. Warm and striking. Bargain prices on 1 3/4–2" bulbs.

***6701**: 2 for $3.75* ***6702**: 6 for $10.00*
***6703**: 12 for $17.50*

***L.* 'Monte Negro'** Asiatic, 42" Stir a dab of dark chocolate into fire engine red and you've got the intense deep color of 'Monte Negro'. Early: the first lily to bloom in my garden. Bargain prices on 1 3/4–2" bulbs.



***6711**: 2 for $3.75*
***6712**: 6 for $9.50*
***6713**: 12 for $17.00*

***L.* 'Casa Blanca'** Oriental, 40–44" (but I've seen them blooming from 3–8'). Pure white with textured white specks, and bobbing russet anthers. Absolutely gorgeous and their alluring fragrance fills the garden. Always one of our most popular offerings. Big 2 1/4–2 1/2" bulbs.

***6721**: 1 for $2.75*
***6722**: 3 for $6.25*
***6723**: 6 for $10.00*

***L.* 'Salmon Star'** Oriental, 24–28" Salmon-pink flowers have a vivid coral stripe down the midrib of each petal and many darker pink spots. Laura and I tried to describe how this one attracted us. "Think orange Creamsicle," she said. Shorter, compact habit with outward facing blossoms, well suited for border planting. 1 3/4–2" bulbs.

***6731**: 1 for $2.75*
***6732**: 3 for $6.50*
***6733**: 6 for $10.50*

***L.* 'Stargazer'** Oriental, 24–30" Deep rose spotted with darker rose and narrowly edged with white. Fragrant flowers are huge when plants become well established. Continues to be wildly and deservedly popular. Great prices on 2–2 1/4" bulbs.

***6741**: 2 for $3.50* ***6742**: 6 for $9.50*
***6743**: 12 for $17.00*

***Mertensia virginica* Bluebells** or **Virginia Bluebells** or **Virginia Cowslip** When Kip brought bluebells into the office during the daffodil bloom one year, I remembered what a spring treat they are. Clump-forming plant with erect stems and oval veined leaves bears clusters of nodding bell-shaped flowers on terminal cymes. Pink buds open to sky-blue or purple-blue flowers which look a lot like those of borage or Pulmonaria. In fact, another name is *M. pulmonarioides*. Beautiful in shade displays with ferns, with Dicentra, with daffodils or Scilla. Prefer moist lowlands and acid woodsy soil in part shade. 18–24" tall. Dormant in summer. Nursery propagated native to eastern North America. Z3.

***6751**: 1 for $3.50*
***6752**: 3 for $9.25*
***6753**: 6 for $15.50*

***Monarda didyma* Bee Balm** or **Oswego Tea** is loved by bees, butterflies and hummingbirds. Attractive showy flower heads with tubular petals on pincushion heads borne above colorful bracts in July and August. Coarse aromatic foliage. Good for borders, for wet areas and for cutting. A vigorous member of the mint family—some might say invasive. Plant crowns 16–20" apart in light shade in moist soil. Thrives in full sun if given adequate moisture or mulched with leaf mold; tolerates most conditions. Z3.

***M.* 'Beauty of Cobham'** Pale pink flowers atop purple bracts, clump forming purplish green leaves. 36" tall.

***6761**: 1 for $4.00* ***6762**: 3 for $10.25*
***6763**: 6 for $18.00*

***M.* 'Jacob Cline'** Very large 5" red flowers, good vigor and resistance to mildew. Now embraced in the nursery trade as "the best red." 3–5' tall.

***6771**: 1 for $4.50*
***6772**: 3 for $11.50*
***6773**: 6 for $20.50*

***M.* 'Snow White'** Dainty pure white flowers, smaller than other monarda but just as showy. Aromatic mint-scented leaves. 24–32" tall.

***6781**: 1 for $4.50*
***6782**: 3 for $11.50*
***6783**: 6 for $20.50*

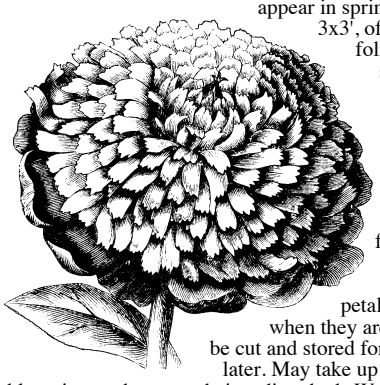
Lily leaf beetle (*Liliocerис lilii*) has made its way to central Maine. We've had good results picking the first flush of adults and dropping them in soapy water; we've seen very few larvae. Some leaves had holes in them but the damage was nothing like the denuded stalks that some gardeners described. Standard organic insecticides are also effective.

Small attractive bright red beetles, the adults, overwinter in soil and plant debris and emerge in early spring to munch, mate and lay tiny dull-orange eggs in irregular rows on the undersides of leaves. Larvae hatch in about a week and feed for 16–24 days on leaves of lilies (not daylilies), fritillaria, and nightshades. The larvae are the real nuisance: voracious eaters, they carry their excrement on their backs to deter predators which makes them mighty unappealing. They then drop to the ground where they pupate in cocoons. In about 25 days they emerge as adults.

***Nepeta faasenii* Catmint 'Walker's Low'** Appealing member of the mint family with grey-green aromatic foliage on long arching stems topped by lavender-blue flowers that provide a good show of color nearly all summer. Excellent for the border or as a tall edging. Its cool colors are at their best paired with soft-yellows like *Digitalis grandiflora*, our new yellow foxglove. Flowers attract bees, butterflies, hummingbirds and human admiration. 2007 Perennial Plant of the Year. Cut way back in midsummer to encourage more bloom. Likes hot and dry, but will grow in any well-drained soil, full sun to part shade. 2–3' tall despite its name. Z3.

***6791**: 1 for $3.75*
***6792**: 3 for $9.50*
***6793**: 6 for $17.50*

***Pæonia lactiflora* Garden Peony** or **Chinese Peony** Red shoots appear in spring and form a bushy clump, about 3x3', of lustrous dark green deeply lobed foliage. Fat spherical buds on sturdy stems above the foliage gradually open into large beautiful flowers from late spring to early summer. (Ants may help the buds to open so don't discourage their presence.) Huge flowers are stunning on the bush and wonderful when cut. Most are fully double but the Japanese type features a single round of petals that frames a clump of different petals inside. If you catch flower buds when they are just marshmallow soft, they can be cut and stored for weeks in the fridge for bouquets later. May take up to 3 to 5 years to establish before blooming and resents being disturbed. Wait several years, until the plants have many stems, before attempting to divide. Stock has at least 2–3 eyes. Z3.



***P. l.* 'Buckeye Belle'** Quite striking! Deep red, nearly maroon, broad outer petals form a cup around smaller inner petals sprinkled with golden stamens. Strong stems make this an excellent cut flower. 30" tall.

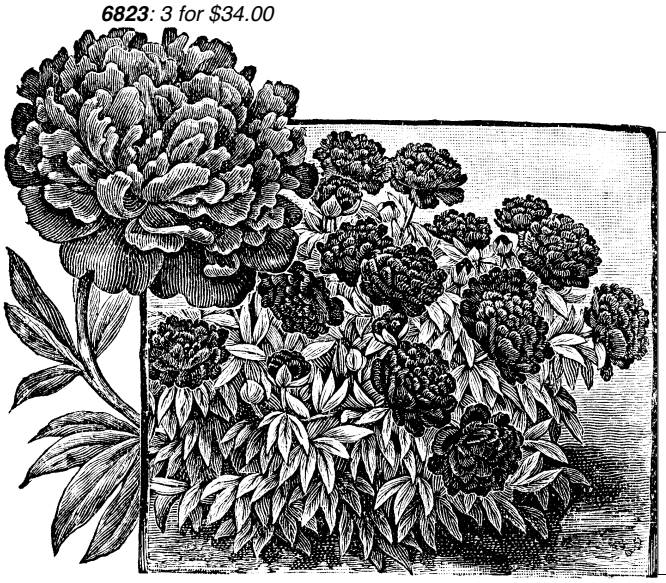
***6801**: 1 for $14.00* ***6802**: 2 for $27.00*
***6803**: 3 for $39.50*

***P. l.* 'Duchesse de Nemours'** or 'Mrs. Gwyn Lewis' Early for a peony, the Duchesse produces 5–7" flowers with spreading outer petals completely mounded over with lush white fragrant ruffled inner petals. Not my favorite blossoms, but my absolute favorite for performance. No guarantees, but mine is sturdy and stocky, never needs staking, thrives in a so-so bed, and is covered every spring with tons of flowers—5 or more to a stalk. In fact, every year I find the flowers more beautiful! 28–36" tall.

***6811**: 1 for $9.50* ***6812**: 2 for $16.00*
***6813**: 3 for $22.00*

***P. l.* 'Primavera'** Light yellow inner petals in a full ball are serrated on their outer edges, much like a dianthus, and surrounded by a collar of single creamy-white petals that fan out to a diameter of up to 5 inches. Exceedingly fragrant Japanese-type. Midseason. 28" tall.

***6821**: 1 for $12.50* ***6822**: 2 for $24.00*
***6823**: 3 for $34.00*



***P. l.* 'Sarah Bernhardt'** Fragrant flowers open with narrow red lines shot onto light rose-pink. Matures to delicate pink with a slight creamy-silvery edge. Can a pink be both warm and silvery? This one is. One of my favorites with exactly the right amount of doubling—appears richly full but not crammed. Late season. 36" tall.

***6831**: 1 for $6.50* ***6832**: 2 for $12.00*
***6833**: 3 for $15.50*

***Pæonia suffruticosa* Japanese Tree Peony** or **Moutan** is expensive, but as garden writer Peter Coats says, "It is worthwhile to sell everything one possesses to buy pæonies, and to dig up everything else in the garden to make room for them." A fashion craze in China by the 7th century, tree peonies appear in poets' songs and as decorative motifs in architecture, porcelain and fabric. 19th-century botanical explorer Robert Fortune reported a specimen outside Shanghai that produced 300–400 flowers a year. Deciduous shrub with deeply cut narrow-lobed medium green foliage forms many (though probably fewer than 300 in its first century) large stunning flowers in early June, before Garden Peony. Semi-double extravagantly big flowers with loose satiny petals. Full sun promotes fastest growth but also fades the flowers which do best in dappled shade; fanatics shade plants with umbrellas while they are flowering. 48–60" tall. 1-yr. plants may need 2–3 years to mature before blooming begins. Z4.

***P. s.* 'Hanakisoi' Tree Peony** features fragrant and elegantly ruffled apricot-pink semi double blooms.

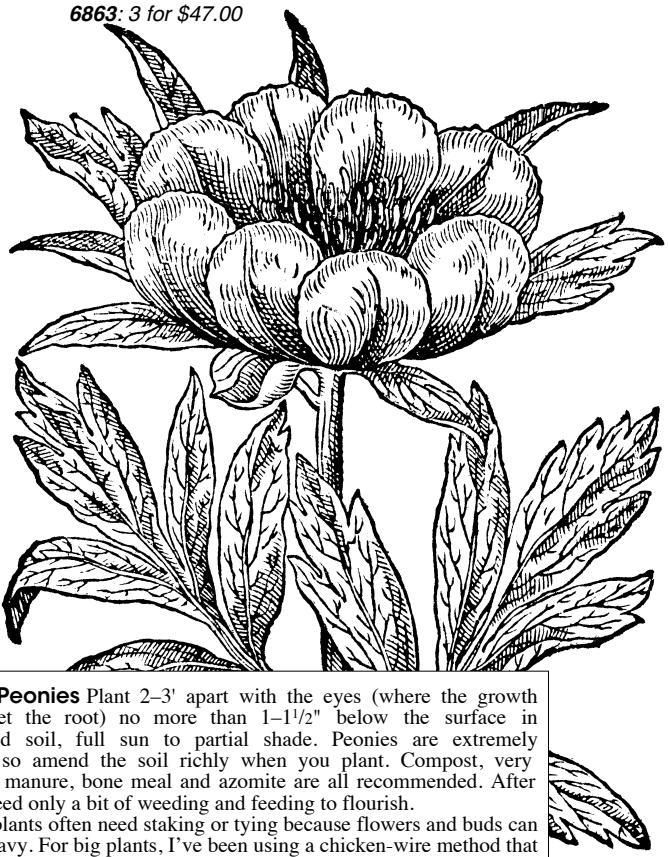
***6841**: 1 for $27.00* ***6842**: 2 for $50.00*
***6843**: 3 for $74.00*

***P. s.* 'Kinkaku' Tree Peony** fully double yellow petals have orange edges giving an overall orange effect.

***6851**: 1 for $27.00* ***6852**: 2 for $51.00*
***6853**: 3 for $75.00*

***P. s.* Purple Tree Peony** Profusion of semi-double deep pink to burgundy blooms with yellow stamens.

***6861**: 1 for $19.00* ***6862**: 2 for $35.00*
***6863**: 3 for $47.00*



Garden Peonies Plant 2–3' apart with the eyes (where the growth shoots meet the root) no more than 1–1½" below the surface in well-drained soil, full sun to partial shade. Peonies are extremely long-lived so amend the soil richly when you plant. Compost, very well-rotted manure, bone meal and azomite are all recommended. After that they need only a bit of weeding and feeding to flourish.

Mature plants often need staking or tying because flowers and buds can be quite heavy. For big plants, I've been using a chicken-wire method that Mary Fowler recommended. Cut a flat circle of chicken wire 2 or 3' in diameter and place it on the shoots when they are 8–10" tall. The shoots lift the wire, grow through it and use it for an invisible support.

Remove spent flowers after blooming, then cut dead foliage to near ground level in fall. Plant along the driveway; a heavy snowbank doesn't bother them.

Tree Peonies tolerate moist soils but require good drainage. Plants thrive in full sun but it may fade flower color. Plant the graft union 2–3" below soil level, in rich well-drained soil. Don't prune except for removing dead wood in spring after plants have leafed out or herbaceous shoots from below the graft union.

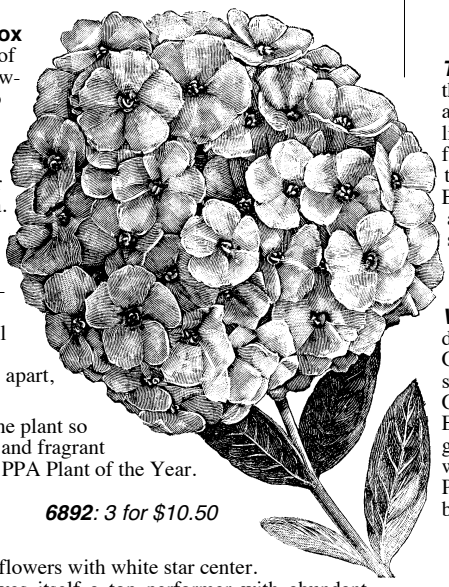
***Penstemon* Beard-tongue rose & purple formula mix** Penstemon is a huge genus characterized by upright leafy stems covered with nodding tubular bell-shaped flowers. Perennials people are coming out with new cultivars at a rapid pace. So long-blooming and colorful that we couldn't choose just one; Laura encouraged me to make a mix. We'll combine *P.* x 'Pretty Petticoat', a 24" tall very showy variety having deep purple flowers and bright oversized white throats with the somewhat bushier *P. barbatus* 'Dark Rose' from the Pinacolada series, 10–16" tall and rosy with a lighter throat. Both attract butterflies and hummingbirds and make good cutflowers, too. Need good drainage and prefer fertile soil and full sun. Plant 8–14" apart. If you order one, you take pot luck; 3 plants will include one Petticoat and two Dark Rose; 6 will have 2 Petticoats and 4 Roses. This year's stock comes in 3" pots. Z5 but maybe Z4 with very good drainage.

***6871**: 1 for $4.90* ***6872**: 3 for $12.50*
***6873**: 6 for $22.00*

***Perovskia atriplicifolia* Russian Sage** blooms in midsummer with slender airy spires of lavender-blue tubular flowers. Finely divided grey leaves are aromatic when crushed. 1995 PPA Plant of the Year. Low-maintenance background or filler beautiful with roses or whites and blues. Perovskia has one of the longest bloom times of any blue-flowered plant. Upright habit, semi-woody shrub. Emerges slowly in spring; cut back after frost. Tolerates drought, loves heat and full sun, can't bear standing water. 3–4' tall. Likes to spread out once it gets established; plant 24–36" apart. I suspect that Zone 4 reports of winterkill are from poor drainage rather than cold, so a cautious Z4.

***6881**: 1 for $4.50* ***6882**: 3 for $11.50*
***6883**: 6 for $20.00*

***Phlox paniculata* Garden Phlox** produces large spreading clusters of fragrant showy long-blooming flowers in mid to late summer when so many blooms are fading, and produces delicate satiny panicles when so many blooms are coarse. Wonderful color and fragrance for accents, border or naturalized area. Attracts butterflies and hummingbirds. Essential component of late-summer wedding bouquets. Extend flowering season by watering and prompt deadheading. Prefers humus-rich soil that stays cool and moist in summer and benefits from regular sidedressing. Plant 2' apart, full sun to partial shade. Z3.



***P.* 'David'** White flowers cover the plant so completely with enormous (6x7") and fragrant blooms that it was voted the 2002 PPA Plant of the Year. 30–42" tall.

***6891**: 1 for $4.00* ***6892**: 3 for $10.50*
***6893**: 6 for $19.00*

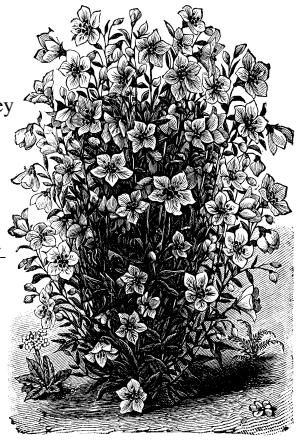
***P.* 'Laura'** Bright fuchsia-purple flowers with white star center. This compact, shorter phlox proves itself a top performer with abundant fragrant blooms. 24–30" tall.

***6901**: 1 for $4.00* ***6902**: 3 for $10.50*
***6903**: 6 for $19.00*

***P.* 'Starfire'** Reliable old favorite often considered the best red. Large (6x6") abundant cherry-red flower clusters are fragrant from midsummer into fall. 25–36".

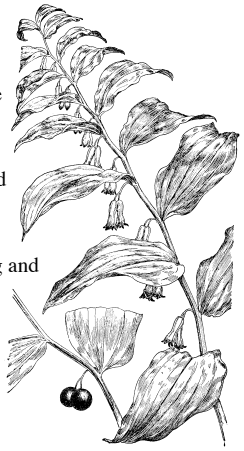
***6911**: 1 for $3.50*
***6912**: 3 for $8.00*
***6913**: 6 for $13.50*

***Platycodon grandiflorus* 'Sentimental Blue' Balloon Flower** Named for its buds which really do swell like balloons before they burst into splendid bell-like single blue flowers with slightly darker blue veins. Clump-forming plant has dark green oval-to-narrow leaves that look good in most settings. Fascinating balloons appear on upright stems above the foliage in mid to late summer and are good for cutting. Sometimes self-sows, likes moist well-drained soil. Compact variety is 6–8" tall so plant 8–10" apart. One of the last perennials to emerge in spring so be careful not to disrupt or plant over it. Z3.



***6921**: 1 for $4.25*
***6922**: 3 for $11.00*
***6923**: 6 for $18.00*

***Polygonatum biflorum* Solomon's Seal** forms clumps of graceful arching stems about 3' long with long narrow alternate leaves. Greenish-white bell-shaped tubular flowers dangle from the stems in a row in late spring, and become small round blue-black fruits in early fall. Shade- and moisture-loving, with a serene habit, Solomon's Seal is ideal for the shade or woodland garden and makes a good foil for ferns. Don't confuse it with False Solomon's Seal which has a plume-like flower at the *end* of its stem. Native Americans used the root tea for ailments of stomach and lung and for general debility, and used washes from the root for all kinds of external injuries. I am not aware of local herbalists using this native plant nowadays. Sends up a few more stems every year; sturdy and long-lived. Nursery propagated. Z3.



***6931**: 1 for $3.50*
***6932**: 3 for $10.00*
***6933**: 6 for $17.00*

***Trillium erectum* Red Trillium** or **Wakerobin** or **Stinking Benjamin** Our local wildflower preserve features huge patches of red trillium blooming in late April, a spectacular and pleasing sight. All the descriptions mention a bad smell, but we don't get the "stinking" part, detecting only a faint oceany hint of tidal flats. Maroon blossom with three petals and three sepals sits erect on a short stem above the three oval leaves in a single whorl. Grows in moist rich woods, full or part shade, from Nova Scotia to the mountains of Georgia, west into Michigan. Nursery-propagated stock. Z4.

***6941**: 1 for $3.50* ***6942**: 3 for $9.00*
***6943**: 6 for $14.00*

***Trollius* x *cultorum* 'Orange Princess' Globeflower** One could call them big overgrown hyper-selected buttercups and I do, but I am also crazy about Trollius. Palmately lobed, then further divided and toothed (buttercup-like) leaves form a mound. Spherical to bowl-shaped orangey-yellow double flowers bloom in late spring, around the time of late tulips, on stems above the foliage. That time of year the fancy petal-filled flowers seem miraculous. Excellent for cutting. Ideal for a moist border, streamside, or naturalizing in a damp meadow. Likes moist to wet settings, heavy soil, full sun to part shade. Cut back after blooming. Plant 8–12" apart. 12–24" tall. Z3.

***6951**: 1 for $4.50* ***6952**: 3 for $11.50*
***6953**: 6 for $20.00*

***Veronica spicata* 'Sunny Border Blue' Speedwell** is sometimes described as the best veronica. 1993 PPA Perennial of the Year. Gentian-blue flowers from early summer into autumn. Multiple erect flower spikes, each thickly covered with tiny tubular blossoms, are 18–20" tall. Clump-forming plant has narrow glossy deep green finely serrated leaves. Excellent addition to border or rockery. Good for cutting. Easy to grow in good well-drained soil, full to partial sun. If I were building a garden I would combine the blues—Catmint, Hyssop, Lavender, Platycodon, Perovskia and this one—with white 'David' phlox. But I already have more beds than I can tend. Z3.

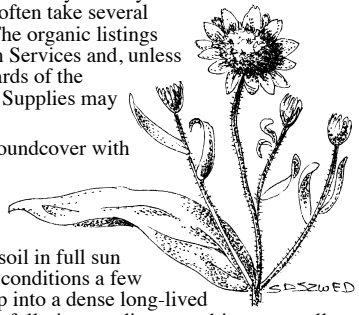
***6961**: 1 for $3.50*
***6962**: 3 for $9.00*
***6963**: 6 for $16.00*

Perennial Medicinal Plants

Growing medicinal plants in your garden gives you the opportunity to know their personalities, forms, uses and spirits. It also helps prevent wild plants from being overharvested. Medicine made from your plants returns you to your garden, regardless of the time or the place that you use it.

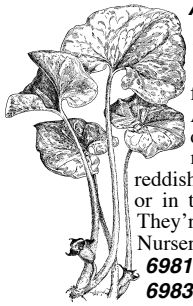
Many of the other plants we list have a tradition of medicinal use as well. These include lavender, bee balm, peony, rose, elder, hops, ginkgo, linden, hawthorne, witch hazel, blueberry, cranberry and highbush cranberry. (Index on p. 59.)

Like most perennials, these appreciate a fall mulch and a sidedressing of compost or leaf mold in the spring. Some may take a year or more to establish before they flower; roots often take several years to reach harvestable maturity. The organic listings are certified by MOFGA Certification Services and, unless otherwise noted, grown by Gail Edwards of the Blessed Maine Herb Farm in Athens. Supplies may be limited, so order early.



Arnica chamissonis Spreading groundcover with bright yellow daisy-like flowers used externally in oils and salves to treat bruises, sprains, and inflammation. Never taken internally except in homeopathic doses. Thrives in moist soil in full sun but will take some shade. In the right conditions a few plants spaced a foot apart will develop into a dense long-lived patch. Blooms in July. Grows successfully in our climate and is a generally accepted substitute for *A. montana*. Lauren Cormier grew these North American natives. Z3. **ME Grown.**

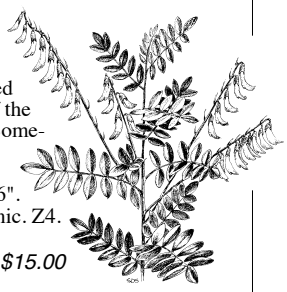
***6971**: 1 for $5.75* ***6972**: 2 for $10.00*
***6973**: 3 for $13.50*



Asarum canadense **Canadian Wild Ginger** Heart-shaped leaves up to 7" wide will spread into a beautiful groundcover 6–12" tall if given humus, shade and plenty of moisture. Leaves are large and slightly fuzzy, not small and glossy like the European species. Aromatic roots used like other gingers for their warming qualities and for soothing indigestion, coughs, colds, motion sickness. Grown for roots and foliage. The small reddish-brown urn-shaped flowers grow near the soil surface or in the leaf mold so crawling insects will pollinate them. They're fun to search for but won't decorate your landscape. Nursery propagated in New Hampshire. Z3.

***6981**: 1 for $3.75* ***6982**: 3 for $9.50*
***6983**: 6 for $17.50*

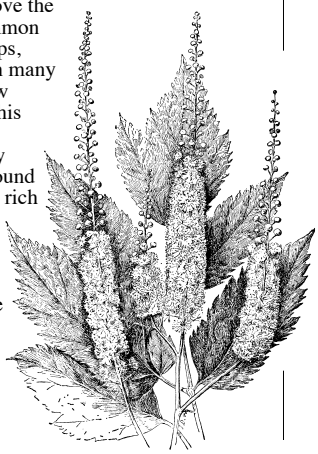
Astragalus membranaceus **Chinese Milk Vetch** Deep-rooted leguminous plant bears rows of whitish-yellow flowers on arching racemes. Forms an upright bush with many stems each thickly covered with tiny pinnate leaves and small racemes. We tried to describe mine: It's not beautiful and it's not ugly, but it has so many small planes tilted in so many directions that it catches the eye in a wonderful way. I'll need several more plants before I can part with one for harvest.



Important Chinese medicinal, *huang qi*; when used over many months provides long-term rebuilding of the immune system while helping combat exhaustion. Sometimes combined with Codonopsis in immune-building tonics. Improves digestion. Prefers deep sandy, gravelly well-drained soil and full sun. 18–36". Harvest 4- to 6-year-old roots in fall. Certified organic. Z4. **ME Grown.**

***7011**: 1 for $8.50* ***7012**: 2 for $15.00*
***7013**: 3 for $20.00*

Cimicifuga racemosa **Black Cohosh** or **Black Snakeroot** flourishes in the wilder part of the garden or shady border. In late July and August, long arching racemes of creamy flowers rise above the mound of compound foliage, hence another common name, **Fairy Candles**. Anti-spasmodic for cramps, pains, cramped nerves and emotions, included in many peri-menopausal formulas. I've heard quite a few women my age say rather passionately, "I *love* this plant!" Diuretic and anti-inflammatory. Easy to grow, long-lived, needs division or harvest every 4–5 years. Racemes extend 6–10' over a 3–4' mound so it becomes very stately. Plant 30–36" apart in rich moist soil high in humus. Good in boggy spots. Prefers part shade, but tolerates full sun in deep moist soil. On the United Plant Savers At-Risk List, for being over-harvested. They list it under a new botanical name: *Actaea racemosa*. We are happy to list certified-organic black cohosh grown by Joanna Linden. Z3. **ME Grown.**



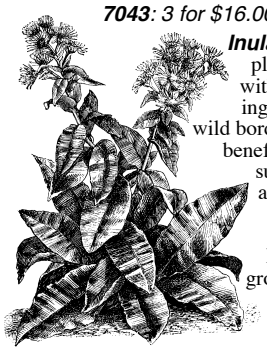
***7021**: 1 for $6.50*
***7022**: 2 for $11.00*
***7023**: 3 for $15.50*

Echinacea purpurea **Purple Coneflower** Some year we may offer a named ornamental strain of Echinacea, but it gets less and less likely. Gail Edwards' organically grown medicinal strain is stunningly beautiful and strikes me as more valuable than a merely ornamental cultivar, even if you use it only for ornament. *Echinos* means spiny and the flower's big conical centers are very spiny and coppery yellow-brown, surrounded by a single row of reflexed lavender-purple petals. Flowers attract butterflies and beneficial insects, and last well when cut. Their colors marry pinks, oranges, lavenders and golds that wouldn't ordinarily go together in beds or bouquets. Tincture the roots of 3-year-old plants for a remedy that gives an immediate boost to the immune system; use it when you feel a cold or flu coming on. Vigorous grower likes full sun and sandy loam, self-sows and tolerates wind, heat and drought once established. 30–48" tall. Plant 20–30" apart in light soil. Certified organic. Z3. **ME Grown.**

***7031**: 1 for $7.00* ***7032**: 2 for $12.50*
***7033**: 3 for $16.00*

Hyssopus officinalis **Hyssop** Blue-violet flowers on erect stalks blossom from June through September and are wonderfully ornamental. Well worth growing for an aromatic low hedge or in the border even if you don't have an herb garden. Bees love it. Leaf infusions long used for sore throats and stomach troubles, flower spikes in cough syrups. Thrives in dry soil, useful on slopes and any sunny difficult place. 12–20" tall. Plant 12–24" apart in poor soil, full sun to light shade. Certified organic. Z3. **ME Grown.**

***7041**: 1 for $7.00* ***7042**: 2 for $12.00*
***7043**: 3 for $16.00*



Inula helenium **Elecampane** Spectacular big plant sports pretty bright yellow daisy-type flowers with very narrow petals, long coarse leaves. Achieving heights of up to 8', good as an accent or part of a wild border in sun or part shade. Helps attract and support beneficial insects. Mucilaginous roots are expectorant; support and decongest lungs, are anti-bacterial and anti-fungal, and help balance blood sugar. Harvest 2-year-old or older roots in mid-fall when they contain up to one quarter their weight in inulin. Plant 2-3' apart, ordinary garden soil. Sustainably grown by Lauren Cormier. **ME Grown.**

***7051**: 1 for $5.75* ***7052**: 2 for $10.00*
***7053**: 3 for $13.50*

- ***Lavandula*** **Lavender** See #**6671**.

Scutellaria lateriflora **Mad-dog Skullcap** or **Virginia Skullcap** Subtly beautiful spreading mint-family member native to eastern North America. Small inconspicuous blue-purple flowers climb stalks that grow to about one foot tall. It loves moist swampy soil, woodland gardens, sunny edges, and partial shade but seems to thrive in a variety of conditions. Mrs. M. Grieve's 1931 classic *A Modern Herbal* calls it "one of the finest nervines ever discovered." Aerial parts of plant in full bloom are used medicinally in teas or tincture as a gentle nervine tonic which both relaxes and rejuvenates the nervous system. Also has anti-spasmodic, diuretic and mildly sedative properites. Sustainably grown by Lauren Cormier. Z4. **ME Grown.**

***7061**: 1 for $5.75*
***7062**: 2 for $10.00*
***7063**: 3 for $13.50*

Symphytum officinale **Comfrey** or **Knitbone** Well-known for its soothing properties. Contains allantoin, promotes healing of skin and bone; also demulcent for lung and throat. Hanging bell-like pink flowers much loved by bumblebees open in early summer. Stem and leaves covered with bristly hairs. Easy-to-grow vigorous plant demands space; *can be very invasive*; be careful where you plant it; control with regular harvest. 24–48" tall. Plant 16–24" apart in average well-drained soil, sun or shade. Grown without synthetic fertilizers, pesticides or herbicides in China, ME. Z3. **ME Grown.**

***7071**: 1 for $4.25*
***7072**: 3 for $11.00*
***7073**: 6 for $19.50*

Item	Name	Grown in Maine	Zone	For Wet Spots	For Shady Spots	For Dry Spots	For Wildlife	Vining	Specimen	Hedges	Ground Covers
1384	American Plum		3				♦			♦	
2260	Lowbush Blueberry		2	♦		♦	♦				♦
2280ff	Highbush Blueberry	❁	4	♦			♦			♦	
2370	Grapes	some	3				♦	♦			
2562	Anne Raspberry		4				♦			♦	♦
2606	Polana Raspberry		4				♦				
2660	Killarny Raspberry		4				♦			♦	♦
2685	Nova Raspberry		3				♦			♦	♦
2690	Prelude Raspberry		4				♦			♦	♦
2700	Royalty Purple Raspberry		3/4				♦			♦	
2731ff	Blackberry	❁	3/4				♦			♦	
2829ff	Kiwi		4				♦	♦			
2891ff	American Cranberry	❁	2	♦			♦				♦
2915ff	Juneberry	❁	2	♦	♦	♦	♦				
2990ff	Cornelian Cherry	❁	4		♦		♦				
3010	American Persimmon	❁	4			♦	♦				
3030ff	Hops		3					♦			
3070	Western Sandcherry		3			♦	♦				
3076	Joel Bush Cherry	❁	3				♦			♦	
3082	Beach Plum	❁	3			♦	♦			♦	
3100	Nanking Cherry	❁	2				♦			♦	
3163ff	Elderberry	❁	3	♦			♦			♦	
3238	Regal Lingonberry		3				♦				♦
3245	Highbush Cranberry		2	♦	♦		♦			♦	
3270	Balsam Fir	❁	3		♦	♦	♦			♦	
3350	Dawn Redwood	❁	4	♦			♦		♦		
3360	Russian Arborvitae	❁	3								♦
3400	Norway Spruce	❁	2				♦		♦	♦	
3420	Colorado Blue Spruce	❁	2				♦		♦	♦	
3485	Korean Stone Pine		3/4				♦		♦		
3590	American Arborvitae	❁	2	♦	♦		♦			♦	
3716	Northern Pecan	❁	4				♦		♦		
3760	American Chestnut	❁	4				♦		♦		
3799	Hazelbert Precocious	❁	4				♦			♦	
3815ff	Black Walnut	❁	4				♦		♦		
3985	Red Maple	❁	3	♦			♦		♦		
3990	Sugar Maple	❁	3				♦		♦		
4006	Yellow Birch	❁	3						♦		
4009	Sweet Birch	❁	3				♦				
4014	Heritage River Birch	❁	4						♦		
4025	American Hornbeam	❁	2						♦		
4030	Northern Catalpa	some	4						♦		
4053	American Yellowwood	❁	4						♦		
4090	Ginkgo	❁	3						♦		
4097	Kentucky Coffeetree		3/4				♦		♦		
4135	Amur Chokecherry	❁	2				♦		♦		
4145	White Oak	❁	3				♦		♦		
4150	Swamp White Oak		3	♦			♦		♦		
4170	Red Oak	❁	4			♦	♦		♦		
4190	Cape Rosier Willow	❁	4	♦							
4191	Coral Bark Willow	❁	2	♦					♦		
4195	Niobe Weeping Willow	❁	4	♦					♦		
4200	Snake Willow	❁	5	♦					♦		
4202	Japanese Stewartia	❁	5						♦		
4205	American Linden		3				♦		♦		
4207	Littleleaf Linden	❁	3						♦		
4230	Striped Maple	❁	3		♦		♦		♦		
4240	Redbud		4		♦		♦		♦		
4245	Fringetree	❁	3	♦			♦		♦		
4255	Pagoda Dogwood	❁	3				♦				
4332	Witch Hazel	some	3	♦	♦		♦				
4341	Seven-son Flower	❁	4/5						♦		
4512ff	Crabapples	❁	2,3,4				♦		♦		
4912	Japanese Tree Lilac	❁	3			♦			♦		
4926	Camperdown Elm	❁	4/5						♦		
4927	Fragrant Abelia	❁	4						♦	♦	
4936	Bottlebrush Buckeye	❁			♦						
4945	Bearberry		2								♦

Item	Name	Grown in Maine	Zone	For Wet Spots	For Shady Spots	For Dry Spots	For Wildlife	Vining	Specimen	Hedges	Ground Covers
4954	Dutchman's Pipe		4		♦			♦			
4961ff	Chokeberry	❁	3/4				♦				
4997ff	Butterfly Bush	❁	4				♦				
5027	Siberian Peashrub	❁	3			♦	♦			♦	
5038	American Bittersweet	❁	3				♦	♦			
5049	Buttonbush	❁	4	♦	♦		♦				
5064	Leatherleaf	❁	3	♦			♦				
5069	Ruby Spice Summersweet	❁	3	♦	♦		♦			♦	
5116	Royal Purple Smokebush	❁	4			♦			♦		
5127	Redvein Enkianthus	❁	4						♦		
5142	Northern Gold Forsythia	❁	3						♦	♦	
5168	Annabelle Hydrangea	❁	3		♦						
5172	Endless Summer Hydrangea		4		♦				♦	♦	
5182	Limelight Hydrangea	❁	3/4		♦				♦	♦	
5184	Late Panicle Hydrangea	❁	3						♦	♦	
5188	Inkberry	❁	4	♦			♦				
5189ff	Winterberry	some	4	♦			♦			♦	
5204	Henry's Garnet Sweetspire	❁	4	♦		♦				♦	
5210	Beautybush	❁	4						♦		
5215	Spicebush	❁	4	♦	♦		♦				
5222	Dropmore Scarlet Honeysuckle		3		♦		♦	♦			
5240	Bayberry	❁	2			♦	♦			♦	
5267	Blizzard Mockorange	❁	3						♦		
5288ff	Potentilla	❁	2	♦		♦				♦	
5350	Rosa rugosa	❁	2			♦	♦			♦	♦
5384	Carefree Sunrise Rose		4			♦	♦		♦		
5424	Hansa Rose		3			♦	♦		♦		
5442	Hope for Humanity Rose		3			♦			♦		
5488	Morden Blush Rose	❁	3			♦	♦		♦	♦	
5493	Morden Sunrise Rose		4			♦			♦		
5500	Purple Pavement Rose		4			♦	♦		♦		
5519	Seven Sisters Rose	❁	4			♦	♦		♦		
5529	Schneekoppe Rose		3			♦	♦		♦		
5533	The Fairy Rose	❁	4			♦			♦		
5544	William Baffin Rose	❁	3			♦	♦				
5562	Thimbleberry	❁	3				♦				
5568	Black Pussy Willow	❁	4	♦			♦				
5577	Blue Leaf Arctic Willow	❁	3	♦			♦			♦	♦
5582	Japanese Fantail Willow	❁	4							♦	
5617ff	Spirea	❁	4							♦	
5720	White Snowberry	❁	3		♦		♦				
5723	Coralberry	❁	4				♦				♦
5728ff	Lilac	❁	2,3,4			♦				♦	
5918	Korean Spicebush		4				♦		♦	♦	
5921	Witherod Viburnum		3				♦			♦	
5940	Snowball Viburnum	❁	4	♦			♦		♦	♦	
5958	Carnival Weigela		3/4						♦		
6251	Yarrow		3			♦					
6301	Jack-in-the-Pulpit		4		♦						
6351	Lily of the Valley		2		♦	♦					♦
6461ff	Ferns		2,3	♦	♦						♦
6531	Daylily	❁	2						♦		♦
6491ff	Geranium		4			♦					♦
6601	Hibiscus		4			♦			♦		
6611	Hostas		3		♦				♦		♦
6671	Siberian Iris	❁	3	♦					♦		
6701	Lavender		3			♦					
6801	Bee Balm		3	♦							
6881	Tree Peony		4						♦		
6921	Russion Sage		4/5			♦					
7041	Canadian Ginger		3	♦	♦						♦
7061	Black Cohosh	❁	3	♦	♦						
7081	Echinacea	❁	3			♦					

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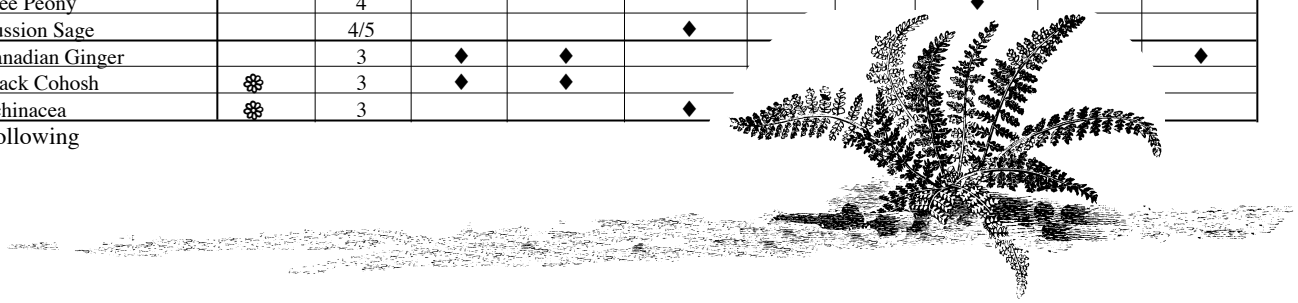

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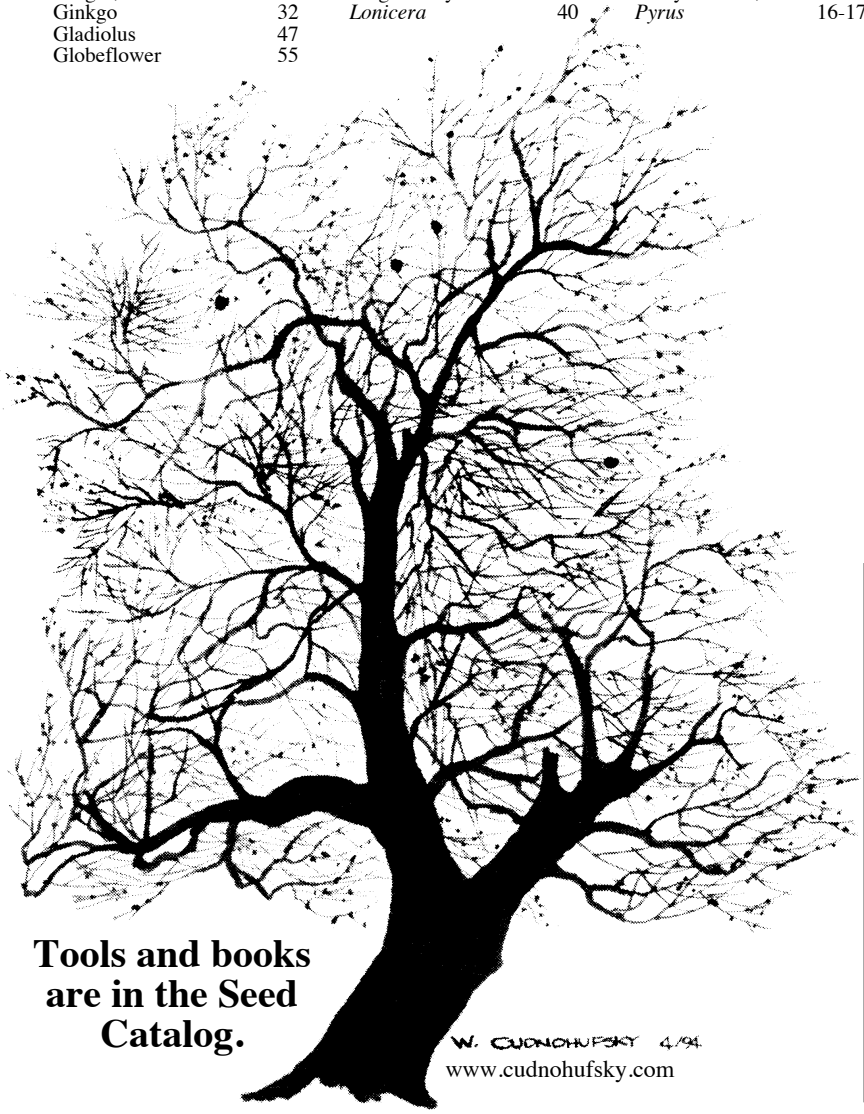

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